Submission in Response to The Productivity Commission Draft Report Sept 2010 - Rural Research and Development Corporations

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Note: This is a private submission and is not intended to represent the views of any organisations with which Dr Sheil may be associated.

About the Author:

Dr Sheil has extensive experience across a range of fields that are highly relevant to this inquiry including;

1: The Rural RDC sector

- Dr Sheil is a director on the board of Australian Wool Innovation having been elected to the position in November 2008, at a time of financial and strategic challenge for the company. The company is currently implementing an extensive reform agenda to improve productivity, governance and accountability.
- This experience has relevance to understanding *optimal measures to improve productivity within the RDC model*.

2: Medical Health and Research Sector

- Dr Sheil is a specialist paediatrician and medical research scientist with over 20 years experience in basic and clinical sciences in both the Government funded, not-for profit and private domains, nationally and internationally.
- The Australian medical R&D sector is well governed, collaborative, successful and productive. *Significant insights and advantages can be gained from examining parallels between Medical and Rural R&D investment.*

3: Private / Commercial R&D sector

- Dr Sheil is a founding director on the board of a commercial research and development company, which successfully developed and commercialized an analgesic preparation for sheep, and which has built substantial collaborative private-public funded research partnerships for ongoing rural R&D.
- This experience is relevant to understanding the manner in which collaborative interaction between *public, not-for-profit and private research investment delivers optimal outcomes for the community*.

4: Agriculture and primary production

- Dr Sheil Is a primary producer with over 10 years experience running a commercial sheep grazing enterprise in NSW.
- This experience provides an understanding of the enormous effort required to maintain sustainable food and fibre production against an ever-evolving array of adversarial factors.
- This experience crosses the city-country divide and provides an understanding of the critical importance of agricultural R&D not only to producers, but to the entire community.

5: Future National R&D planning

- Dr Sheil was a participant at the 2020 conference to guide the future of medical research. These talks focused on the need to improve productivity through increased strategic attention and investment in research “transfer” activities to ensure successful transfer of R&D outcomes to the community.

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CONCLUSION:

The value of agricultural R&D to the community and the benefit of the RDC model of investment have been significantly underestimated in the draft report and this needs to be comprehensively re-examined.

The benefits to the community derived from agricultural R&D are similar and closely related to those derived from medical and health R&D. Comprehensive methods for assessing the value and adequacy of investment in medical and health R&D (or "health" of the sector) are available and provide a useful model with which to compare the "health" of agricultural R&D under current levels of investment through the rural RDCs.

Unfortunately this has not been undertaken. Consequently, there has been failure to detect serious 'symptoms and signs' of under-investment, and to appreciate the potential negative outcomes for the entire Australian community.

The need for increased investment in rural R&D related to land, water and energy, has been identified in the draft report, and this recommendation should be supported – *however* this should not occur at the expense of other agricultural R&D endeavours, such as are funded through the RDC model.

A reduction in funding to the RDCs as recommended in the draft report, has the potential to exacerbate the current situation of under-funding, undermine the RDC model and risk a severe deterioration in the success and sustainability of the national rural R&D effort.

An alternative option is to ensure that all funding is secured at current levels, as a minimum, while a more comprehensive assessment of the "health" of R&D investment across all key sectors is carried out. Additional funding should then be delivered to any and all sectors of need, in parallel with measures to ensure optimal productivity for dollars available in each sector.

Opportunities to achieve significant productivity improvements within the RDC model are available. These are exemplified in the reform agenda that is underway at Australian Wool Innovation (AWI).

AWI is a leading example of an RDC that is undertaking significant reform in an attempt to deliver optimal rural R&D productivity in the face of significant funding constraints.

ONE PAGE SUMMARY OF SUBMISSION

TOPIC 1: The value of agricultural R&D to the community has been significantly under-estimated in the draft report: Key points;

- Agricultural R&D focuses on "sustaining or improving the quality, abundance, and security of food, water and fibre". Akin to medical R&D, this is a *CRITICAL* endeavour that underpins the resilience, prosperity, health and productivity *of a community*.
- Where there is insufficient investment, factors will combine to reduce the capacity *of a community* to achieve this key objective and erode the resilience, prosperity, health and productivity *of the entire community*.
- The draft report does not adequately identify the intrinsic value of agricultural R&D or the need for sufficient government investment to prevent the negative outcomes above.

TOPIC 2: The *additional* value *to the community* provided through the RDC model of investment in agricultural R&D has also been significantly under-estimated: Key points;

- The RDC model co-links government investment with additional voluntary contributions from agricultural producers. This significantly increases the total monies available for and invested in agricultural R&D on behalf of, and to the benefit of the entire community.
- Arguments that some R&D benefits producers only, while other R&D primarily benefits the community are inherently flawed. All R&D contributes to the same pool of knowledge that underpins *the resilience and intrinsic prosperity of the community by contributing to "maintain or improve the abundance and quality of food water and fibre"*
- Withdrawing government funding from sectors of the RDC model will undermine it, and increase the risk to the community posed by underinvestment in agricultural R&D.

TOPIC 3: The draft report does not adequately assess the "health" of agricultural R&D based on current levels of investment. Consequently it has failed to identify the urgent need for increased funding across key sectors. Key points;

- The "health" of investment in agricultural R&D may determined by factors such as;
    1. The degree to which the investment is contributing to the sum total of human knowledge regarding sustainable, safe and nutritious food and fibre production.
    2. The extent to which the agricultural industry is maintaining or improving the abundance and quality of food, water and fibre per capita on behalf of the community
    3. The degree to which it is attracting and retaining skilled research personnel and educational and learning capacity.
- *Underfunding* is evident when these factors are in decline
- Analyzed in this manner there are clear signs of under-investment in key sectors of the national agricultural R&D effort, which should be ringing alarm bells for the community.
- This has not been adequately identified in the draft report. This is because an "economic rationist" approach has been used in which the adequacy of government investment has been assessed by comparing it to other countries and/ or other "businesses", rather than examining the "health" of the agricultural R&D sector based on key performance measures such as those above.

TOPIC 4: Measures required to restore and maintain the health of agricultural R&D on behalf of community through the RDC model; Key points

There are 3 key measures required;

1. Increase amount and security of Government investment across all sectors of need.
2. Improved accountability to shareholders through direct contested director election models
3. Increased productivity measures within the RDC model – including, increased cross-sectoral planning; improved research governance frameworks and project selection processes, inclusion of "research transfer" specialist teams, integration with marketing and promotion activities.

TOPIC 5: Australian Wool Innovation (AWI) as a leading example;

- AWI invests in sheep and wool-related R&D on behalf of the government and community supported by voluntary funds from woolgrower levy payers. Significant challenges have reduced funds available, and there is clear evidence of under-funding in this sector. In response, AWI is undergoing significant reform to optimize productivity and maximize its contribution to the national agricultural R&D effort within these existing constraints.
- The commission has mis-understood, mis-represented and under-estimated the process of reform that is underway at AWI.

SUBMISSION

TOPIC 1: The Fundamental Value Of Agricultural R&D To The Community Has Been Significantly Under-Estimated In The PC 2010 Draft Report:

Agricultural R&D focuses on "sustaining or improving the quality, abundance, and security of food, water and fibre". This is a *CRITICAL* and *FUNDAMENTAL* endeavour that underpins the resilience and prosperity of a community, and the health and productivity of its members.

The enormous gains in human health, longevity and productivity achieved over the past centuries owe as much to agricultural R&D (through improvements in the availability and quality of nutritious food, water and fibre) as they do to medical and health R&D – if not more.

It should not be forgotten that inadequate nutrition, dehydration and / or exposure remain the principle causes of infant death, poor growth, developmental delay, vitamin and immune deficiency, disease, infection, and premature death in many countries throughout the world, including some parts of Australia. Reports from the United Nations state; "Hunger and poor nutrition directly or indirectly cause 36 million deaths per year, which is more than 1 death each second on average[i].On average, a child under five dies every 5 seconds as a direct or indirect result of poor nutrition. This is 6 million children per year, more than half of all child deaths[ii].

For this reason, when assessing value and benefit to the community, (and hence return on investment), investment in *agricultural R&D needs to be considered in the same light as investment in medical and health R&D*. These investments "grow the body of knowledge" that contributes to and underpins the health, well-being, growth, sustainability, resilience and survival of the entire community.

In 2006-7, Australia's investment in health R&D was $3 billion, of which the Australian Government contributed approx 1.5 billion[iii]. The average return on investment is estimated to be $2.17 for every $1 invested, with a range of $0.57 to $6.01[iv]. A report commissioned by Research Australia in April 2009 documented that government expenditure in medical R&D has been increasingly steadily over the past decade. It states; "The growth in funding followed the release of the Wills Review (1999)[v] which identified the important investment returns from health and medical research and the need to substantially increase public funding. This was followed by the Investment Review of Health and Medical Research (Grant Review, 2004)[vi] which further promoted the need for research investment to generate social and economic benefits to the community"[vii].

By comparison, the draft PC report estimates that Australia's total spending on rural R&D is around $1.5 billion, of which $710 million is provided by the Australian Government and approximately $250 million is donated by agricultural producers (through levies). Government investment in agricultural R&D is therefore less than half the expenditure on medical and health R&D. In addition, the PC sept 2010 draft report notes that "work by Sheng, Mullen and Zhao (2010) implies that real reductions in public investment for rural R&D since the mid 1990s have contributed to a decline in the rate of agricultural productivity growth in Australia".

The agricultural sector faces a constant series of threats and challenges that erode the capacity of the sector to "sustain or improve the quality, abundance, and security of food, water and fibre" – whether this be due to population growth, land use pressure, diseases, weeds, toxins, drought, climate change, pestilence, predators, OH&S or social pressures, trade impacts, and / or local or global calamity or strife. The greater the knowledge as to how to adapt to, or mitigate these factors, the more resilient and secure the community. It should not be unexpected, therefore to find that reduced levels of investment are accompanied by falling "productivity" – or a reduction in the capacity of the sector to "sustain and improve the quality and abundance of food, water and fibre".

Investing in agricultural R&D is thus equivalent to investing in vital infrastructure – it builds a "dam wall" to contain a growing body of knowledge that is "fed out" to a community to grow it, and sustain it against all the adversities it may face. In times of plenty the community is strengthened by becoming a net exporter of food and fibre, and a net provider of agricultural education, skills and knowledge. This investment acts as an insurance policy, by strengthening the community's capacity to feed itself in times of global calamity or strife.

Where there is insufficient investment, factors such as those mentioned above, will combine to erode the capacity of a community to "maintain or improve the abundance and quality of food, water and fibre" and hence erode the resilience of the community' and, ultimately, the health and productivity of it's members.

Producers should not be seen as the sole or primary beneficiaries of investments in agricultural R&D – but rather as the providers, through whom the benefits of this investment flow out to the community. This is in just the same manner that doctors and allied health professionals are the providers, through whom the benefits of medical R&D are delivered to the community.

Arguments that some R&D benefits producers only (and hence should be funded by producers) while other R&D only benefits the community (and hence is worthy of government funding) are inherently flawed. *All R&D contributes to the same pool of knowledge that underpins the resilience of the community by contributing to "maintain or improve the abundance and quality of food water and fibre"*

The following is an extract from "The Virtuous Cycle 1999 Health and Medical Research Strategic Review" (the Wills Review)[v]

> *"Most advanced economies recognise that investment in fundamental research is a legitimate, core role of governments. The Industry Commission 1995 report on research and development argued that: "Governments have an essential role to play. Knowledge inevitably spreads and may be used in a multitude of ways never envisaged. Its benefits are difficult to constrain or quarantine. When individuals create new knowledge, they do more good for the community than they know or can personally benefit from. Governments therefore need to underpin and supplement the processes of knowledge creation, if these wider benefits are to be adequately realised. This is among the most difficult, and important, tasks of government policy"1*

In essence – Everyone eats, drinks and requires clothing. Everyone is therefore responsible for funding the R&D required to sustain and improve the abundance of high quality of food, water and fibre from the land they inhabit, or which is produced by others on their behalf.

Wherever they are able, governments have a responsibility to invest in agricultural R&D on behalf of, and for the benefit of the entire community across the broad range of agricultural endeavours most suited to the lands they govern.

The draft report does not adequately identify the intrinsic value of agricultural R&D to the community, nor the critical need for sufficient government investment to prevent the negative outcomes above.

TOPIC 2: The *Additional* Value *To The Community* Provided Through The RDC Model Of Investment Has Also Been Significantly Under Estimated:

There are three principle sources of funding for R&D 1: Government, 2: Not for profit R&D bodies which receive voluntary donations or levies, and 3: Private enterprise.

Each has a role to play and contributes to the total R&D effort in a manner that *complements and strengthens the other*.

1. *Private enterprise* invests in R&D that is considered likely to provide a strong *commercial* or *monetary* return on investment.
2. *The Government* invests in R&D that is considered likely to provide a strong *value* return on investment to the community; the *value* is *not necessarily monetary* and–refers to any endeavour that "adds to the body of knowledge that grows the health, welfare, resilience sustainability, productivity and / or prosperity of the community".
3. *Not-for-profit's research providers*, also invest in R&D that is likely to provide a *strong value (as opposed to monetary) return to the community*. However they work to provide *additional funds* into *specific areas of interest*. In the medical field examples include the Cancer Council or National Heart Foundation, which provide additional funds for cancer and heart disease research. *In the agricultural sector this includes the producers co-contributions to agricultural R&D through the "not for profit" RDC model*.

Chapter 4 of "The Virtuous Cycle 1999 Health and Medical Research Strategic Review" (the Wills Review) is entitled "A flourishing Industry sector is critical to reinforce the contributions from the Research and Government sectors", it states;

> *"Governments therefore need to underpin and supplement the processes of knowledge creation, if these wider benefits are to be adequately realised. This is among the most difficult, and important, tasks of government policy"1*
>
> *However, to capture the full benefit of the government's commitment to fundamental research two further ingredients are required:*
>
> *• A research culture that can effectively partner with industry.*
>
> *• Private capital investment to bring these ideas to fruition.*
>
> *This creates a virtuous cycle where an active industry sector provides the taxes and economic growth that in turn supports government investment in fundamental research that in turn provides the seed intellectual capital for industry.*
>
> *Technology-based industries built on publicly funded research are the key to economic growth and prosperity"*[v].

Within this context, the true value of the RDC model becomes apparent. It provides a unique (an enviable) framework through which the government investment in agricultural R&D is used to *leverage additional voluntary contributions from producers* across a range of strategically important agricultural endeavours. This model *significantly increases the total monies available* for, and invested in agricultural R&D on behalf of, and to the benefit of the entire community. In addition, it provides a framework for effective strategic targeting of research investment and delivery of research outcomes through the development of "centres of expertise" that are strategically positioned between the agricultural sector, it's supply chain and the marketplace.

It should be noted that the incentive for people to donate *additional funds* for R&D (medical or agricultural) lies in the opportunity to maximise spill-over benefits that may flow to themselves, their loved ones, friends, family, or future generations in certain areas of interest – whether it be through improved food production, or better treatments for breast cancer. The incentive is thus to provide *additional* research funds *to assist the governments endeavors* – but *not to replace them and / or end up shouldering the entire responsibility for all R&D in those sectors*.

Investment by producers in agricultural R&D through levies should be valued and cherished as an enormous additional "gift" to the community in the same way that voluntary donations for cancer or heart research are valued and cherished.

Unfortunately this is not the position adopted in the PC 2010 draft report.

Instead, the Commission appears to argue for a more "dissociated" model of R&D investment in which Government investment is withdrawn from sectors that provide spill over benefits to producers, the argument being that producers should have adequate incentive to fund this R&D themselves. However, this is like saying that people with leukaemia are the primary beneficiaries of leukemia research and thus should be motivated to fund it themselves. Clearly, such a move denies the intrinsic value of all such R&D to the entire community (regardless of "spill-over benefits to individuals) and would result in weakening and fracturing of the communal R&D effort.

Similarly, the 2010 PC draft report appears to propose "dissociation" from areas of private commercial investment by arguing that government investment in R&D may "stifle" commercial investment. However, experience would indicate that the reverse is true, and that Government investment acts to stimulate *additional* commercial investment in the vast majority of cases. In the medical and health R&D sector, for example, increased government funding over the past decade has stimulated *additional growth* in private sector investment. In essence it has provided a greater "seed-bed" from which commercial investment in R&D has grown.

To achieve optimal outcomes, and return on investment in R&D (agricultural or medical), government, private and not-for–profit funding should be delivered in an *integrated* rather than a *dissociated* fashion. This was clearly identified in "The Virtuous Cycle 1999 Health and Medical Research Strategic Review" (the Wills Review), which defined "a "virtuous cycle", whereby government, research and industry mutually support and feed into each other, delivering returns to the community".

Put simply, *Government investment supports R&D that* does "the ground work" – it is reserved for investment in R&D in which the business case is weak, but the "value return to the community" case is strong. In most / many cases the research undertaken with government investment would never be undertaken based on commercial considerations alone, yet can ultimately lead to enormous community benefit.

RDC or donated funding comes in to "back up" government funding and "kick it along" in various areas of strategic importance.

Commercial investment will "kick in" or occur, once or wherever there is a strong case that the ongoing research will deliver a monetary return. The value of this should not be underestimated in terms of delivering outcomes to the community. An enormous degree of productive R&D goes on in this sector, leading to (for example) new veterinary treatments, fertilizers, seeds, nutrients, machines, fences, IT developments etc. *However, much of it is built on government or RDC funded foundations.*

The RDC model is unique and enviable in the manner in which R&D investment from these 3 different streams is strategically integrated, directed and targeted to deliver outcomes with maximal efficiency across an agricultural sector, it's supply chain and marketplace. Any "dissociation" and / or reduction in government investment is likely to weaken the RDC model, splinter and fracture the national agricultural R&D effort.

TOPIC 3: The Draft Report Does Not Adequately Assess The "Health" Of Agricultural R&D Based On Current Levels Of Investment. Consequently It Has Failed To Identify The Urgent Need For Increased Funding Across The Sector.

The "health" (i.e. benefit and return on investment to the community) of investment in agricultural R&D can be determined by factors such as;

1. The degree to which the investment is contributing to the sum total of human knowledge regarding ethical, sustainable, safe and nutritious food and fibre production.
2. The extent to which the agricultural industry is maintaining or improving the abundance and quality of food, water and fibre on behalf of the community
3. The degree to which it is attracting and retaining skilled research personnel and educational and learning capacity.

Adequate funding is evident when these three factors are being maintained or are growing at a steady rate.

Underfunding is evident when these factors are in decline as may be evidenced by; "loss of knowledge and skills from sector", closing of research institutions, reduced research capacity, reduced production of food or fibre per capita, etc.

A comprehensive review of the "health" of investment in medical R&D is likely to reveal growth in the sum total of knowledge and scientific output, an increase in the number of people coming to Australia for knowledge and education, and health standards being maintained amongst the highest levels in the OECD and so on.

The following is a quote from "Trends In Health And Medical Research Funding" April 2009 commissioned by Research Australia;

> *"Historically, medical research has been an area of particular strength for Australia. Australia has been home to six Nobel laureates in medicine: from Howard Florey's involvement in the discovery of penicillin through to Barry Marshall and Robin Warren's discovery of the Helicobacter pylori bacterium. The ground-breaking vaccine for human papilloma virus was the result of Australian medical research. Despite having only 0.3 per cent of the world's population, Australia contributes 3 per cent of the OECD's medical research publications1".*

A review of the "health" of rural R&D investment would reveal a very different picture. Symptoms of underfunding are rife across the sector, with the wool industry being a potent example. Research institutions are closing and educational capacity is diminishing. Australian rural research publications are declining. In terms of sustaining the abundance of food and fibre, sheep numbers and wool production are at the lowest level for 100 years.

The Australian Superfine Woolgrowers Association, in their submission to the Sept 2010 PC inquiry stated:

> "From 1950 to 1990 CSIRO led the world in wool research both on and post farm attracting the brighter students to careers in the wool industry, Australia led the world in the introduction of objective measurement of wool and in improving processing performance and the predictability of performance. The challenges of the 1990,s following the collapse of the Reserve Price Scheme have seen the closure of the University of NSW Wool Technology courses leaving this area with almost no training for students wishing to have careers in the technical and in particular processing areas, This inevitability has had a negative impact on the competitive position of wool versus other fibres",

and

> "Without government support both through direct funding as well as the provision of infrastructure to carry out R&D, the future competitiveness of the wool industry will be seriously curtailed, The selling off of much of the CSIRO assets that were used for both on-farm and post farm has seen the level of research in the wool industry seriously decline from a position of world pre-eminence to almost insignificance, There is no evidence or possibility that removal or decrease in government support could be replaced by private sector funding. In fact there is considerable evidence that the decline of the importance of the wool industry has been exacerbated by the reduction in support for R&D".

Yet, the wool industry should not be considered an industry without a future, or unworthy of investment. Sheep remain one of the most highly adapted domestic livestock animals suited to the Australian environment, providing a nutrient rich source of food and fibre. Wool fibre is carbon-rich, renewable and sustainably produced. It has many unique and intrinsic attributes that have positive benefits for human health, safety and performance. Sheep grazing enterprises may have a major role to play in on-farm carbon capture and storage. Use of wool products for apparel, insulation and furnishings may also contribute to lower GHG emissions through reducing energy requirements for heating. Clearly the industry is highly valuable, however there has been insufficient investment in R&D to mitigate against the factors that are contributing to its decline. Diminishing levels of government investment in agricultural R&D over the past decade are likely to have played a major contributory role.

The symptoms of under investment in agricultural R&D should be ringing alarm bells for the government and community – yet do not appear to have even been examined in the PC Sept 2010 draft report.

Instead, conclusions regarding the adequacy of investment have been made based on benchmarking investment in rural R&D against "other businesses" and other countries, This is an "economic rationalist" approach that is in danger of leading to a "race to the bottom" mentality as funding is aimed at remaining at or below a nominal "average", rather than being tailored to maintain the "health" of the agricultural R&D sector (as above). This leads to the risk of "misdiagnosis" of investment requirements because symptoms and signs of underinvestment are simply not examined using this approach.

The lack of funding for rural R&D into land, energy and water, has been identified in the draft report – and the conclusion that a minimum of 50 million dollars is required for investment in this area is welcomed and should be strongly supported, *but not at the expense of other areas of agricultural R&D endeavour* - p*articularly those that are already showing evidence of under funding*.

Wherever underinvestment exists, and remains undetected, and / or is not remediated – there will be constant erosion of the capacity of the community to sustain abundant nutritious food, water and fibre production, and there will be loss of net knowledge skills and educational capacity from the agricultural sector. It is as if the "dam wall" built by investment in R&D develops cracks and begins to leak. The "knowledge skill and experience" that underpins the resilience and intrinsic prosperity of the community drains away, lowering it's over-all "wealth".

In this situation it is fruitless to try and "patch" a crack in the dam wall by "pinching" support materials from another nearby section that is itself already showing signs of fracture. This will simply lead the wall to crack in another area. This is the likely outcome should 50 million dollars of funding for land, water and energy R&D be found by reducing funding to other areas of agricultural R&D endeavour.

Instead materials (investment) must be brought from outside to repair and strengthen the entire wall.

Significant additional in agricultural R&D is required. It should not be difficult to find the needed money at a time when the country is growing rich on the back of a resources boom and has an imperative to re-invest this growing wealth in critically needed "infrastructure", in "future proofing" and in developing world class "education and knowledge provider industries" that will sustain the countries economy once the non-renewable resources have all run out.

TOPIC 4: Measures Required To Restore And Maintain The "Health" Of Agricultural R&D via the RDC Model

There are 3 key areas of reform required;
1: Reforms to increase amount and security of government investment in rural R&D
2: Reforms to increase productivity within the RDC model
3: Reforms to Increase accountability of RDCs to government and levy payers

1: Reforms to increase the amount and security of Government investment in rural R&D

The first and most important need is to institute a system by which the "health" of the agricultural R&D sector is monitored on a regular basis so that "symptoms and signs" of under-investment can be detected and remediated early, and sufficient funds can be supplied to ensure that stable growth is occurring.

The National Rural R, D and E strategy, will assist with this endeavour by providing an audit of Australias rural research activity and capacity, on a regular basis. It is possible that this system could be further enhanced to also set and monitor national rural R&D "KPIs" based on the objective to "sustain or improve the abundance and quality of food, water and fibre". This might include monitoring factors such as; net annual research output, growth versus decline in knowledge base, growth versus decline in educational opportunities and rural research capacity, assessment of land area under sustainable production versus land area lost or removed from sustainable production, growth versus decline in net annual production of food and fibre per capita and so on. As noted above, the methods by which Australian investment in medical and health R&D is monitored should provide a helpful comparative model.

The RDC model of investment provides exceptional value and should be strengthened and supported. At present there are clear warning signs of under investment in agricultural R&D across the national framework. For this reason, n*o funding should be withdrawn from any sector of the national agricultural R&D effort at present*. Instead, current levels of investment should be *maintained as a minimum*, across all sectors while the further work is undertaken to identify key sectors of greatest need. *Additional funding* should then be injected into these areas, coupled with improved productivity measures as outlined below.

Increased security of funding is also required to allow longer term strategic planning and R&D investment, and to provide a more certain environment to support stable career development pathways for agricultural scientists. This could be achieved by providing RDC *funding agreements over secure 6 year cycles* instead of the current 3 year cycles, coupled with additional accountability measures (also outlined below)

2: Reforms to increase productivity within the RDC model

There are several key reforms that could be implemented within the RDC model to increase productivity (ie. value of research output per dollar) to the community. These include;

a) Strengthen cross-sectoral strategic planning and integration of research effort, while maintaining RDCs as centres of "expert focus"

As noted above the RDC model should be strongly supported. The Individual RDCs are uniquely positioned in the "crux" of their relevant sectors. Agricultural R&D investment is enhanced by the expertise and networks that have developed and the two-way integration between on -farm production, supply-chain and marketplace.

Nevertheless, efficiencies can be delivered through stronger cross-sectoral co-operation, integration and planning to minimize overlap and ensure efficiencies in research delivery. This is occurring through initiatives such as the CCRDC and National R,D and E strategy, which should also be supported.

b) Improve the research governance framework within individual RDCs

(This refers to the manner in which research projects are chosen, conducted and reported)

At present, the manner in which research projects are chosen is rather "hap-hazard" and "obscure" when compared (for example) with the medical research governance framework.

There are several opportunities to Improve the research governance structure to be more open, transparent and merit based. These include;

i) Improved strategic planning processes – priority research identification and targeting should ideally occur through a structured stake-holder engagement process during strategic planning, in which input from government, levy payers and stakeholders *is collated and augmented by input from key scientific research providers and advisors*.

ii) Improved project selection processes - RDCs should work towards developing a "2-teir' R&D project selection process.

1: Commissioned research – RDCs are ideally placed to identify priority research needs for an agricultural sector, and thus to commission work in this field. Where these are large investments, tendering this work through consistent, transparent tendering processes – will improve productivity, and provide more clarity and consistency for research providers.

2: Annual or bi-annual "open call" research opportunities – There is great merit in having open call research processes that call for people to submit their research "ideas" through a competitive, merit based grant system on an annual or bi-annual basis - much like occurs in the medical and health R&D governance framework such as through the NH&MRC, and funding bodies such as the National Heart Foundation.

Call processes should clearly define the priority research target areas, and have clearly defined, transparent. independent peer review and merit based scoring systems. This allows research "ideas" to be rated against each other based on merit and the "best ideas available" can be chosen for the available budget.

This allows for "competition of ideas", "scientific excellence", "blue sky thinking" to be incorporated into RDC research programmes. It also allows a wide selection of stakeholders to compete on the same footing for the available budget.

iii) Enhancing career pathway opportunities. There are several measures that could be incorporated into RDC project selection processes to assist the development of structured career pathways for agricultural scientists.

1. Incorporate "track-record" acknowledgement in the project scoring and selection process, to "reward and encourage" successful scientists to pursue additional research.
2. Develop a recommended pay scale system based on scientific experience – akin to the NH&MRC research pay scale guidelines for medical and health scientists.
3. Cross-sectoral alignment of the call process and project selection process to provide a consistent, predictable funding opportunity for research providers and scientists.

c) Implement "research transfer" units into all RDCs

R&D investment is wasted if outcomes do not reach the community. However the process by which R&D outcomes are transferred to the community (or "marketplace") can be costly and complex. This process often requires personnel with specific skill-sets such as business development, contract negotiation, legal and IP management, and marketing and promotion. Private enterprise can be relied upon to "pick up these costs" and commercialise R&D outcomes wherever there is a potential *monetary* return, but not where the return is primarily a "value" return to the community (as defined above, or perhaps otherwise referred to as "commercial failure"). In this case, the role falls to the government, and / or RDCs.

RDCs require access to teams skilled in "2-way transfer" of R&D outcomes. This includes "direct transfer" of R&D outcomes *to the marketplace*, and "indirect transfer" to the community *via producers*.

Most of the beneficial outcomes from rural R&D require transfer to the community indirectly, *via producers*. This refers to all R&D outcomes that contributes to sustain and improve the abundance of high quality food, water and fibre – including (for example) outcomes that minimize costs of production, minimize the use of toxic chemicals, increase the sustainability and productivity of the landscape, reduce the impact of pestilence and predation etc.

However, a significant proportion of R&D outcomes require direct transfer to the community (or *marketplace)*– this may include (for example) information regarding; the health, safety or performance benefits of wearing or sleeping under wool, or the health and nutritional benefits

of eating particular types of meat or grain, or the environmental and energy benefits that can be achieved through use of natural products and produce in the home.

For this reason it is important that funding agreements not only support and encourage "extension" activities *to producers*, but also *support and encourage marketing of research outcomes and knowledge directly to the community*,

Marketing activities can be critically important to transfer R&D outcomes to the community. Therefore, use of R&D funding for "marketing" must *NOT* be disallowed in a blanket fashion (as has been recommended in the draft report). This will result in under-investment in marketplace transfer of research outcomes, which, in turn will result in waste of the original R&D effort and investment.

d) Integrate R&D with marketing and promotion wherever possible.

Several of the RDCs provide R&D and marketing roles for an agricultural sector. This should be encouraged wherever possible. These RDCs employ people with skills in science and marketing and have extensive networks throughout the supply chain and marketplace. This provides the opportunity for improved R&D planning through access to detailed market intelligence and consumer feedback. It also fosters the development of effective "transfer" teams and provides greater skill and efficiency in delivery of R&D outcomes to the community

3: Reforms to improve accountability of RDCs to government and levy payers

The importance of improved security of funding through longer term funding agreements is discussed above. Improved accountability measures (to shareholders and the government) could be adopted, in parallel, to provide intermediate accountability measures to underpin longer term funding agreements.

1. A*ccountability to government – suggested accountability measures*

- Baseline funding agreement every 6 years – based on critical review of the "health" of R&D investment in the sector, performance and government priorities.
- Annual monitoring and progress assessment – via quarterly progress meetings, annual reports, and AGM
- Every second year - independent performance reviews, *linked to performance related bonus payments*.

Note: A performance related bonus system would provide a method to encourage good performance (and discourage poor performance) on a 2 year timetable, while still maintaining stability of baseline funding over 6 year periods.

2. A*ccountability to levy payers - suggested accountability measures;*

    - Baseline vote on levy payments every 6 years – based on critical review of performance, return on investment and proposed strategic direction.
    - Annual monitoring and progress assessment – via annual reports, AGMs and stakeholder engagement forums
    - Every second year - independent performance reviews *and democratic and contested independent director election process*.

Note: Many RDCs currently have boards that are either appointed via nomination committees or elected in uncontested elections. This denies levy payers the opportunity to hold boards accountable for performance, which is a significant impediment to increase productivity within the RDC model at present. All boards should move to a democratic director election system that provides direct accountability to shareholders. This is discussed further below (see 5: AWI as an example)

TOPIC 5: Australian Wool Innovation as an Example.

The commission has been highly critical of Australian Wool Innovation in the draft report, however has failed to appreciate;

1: The strengths of the RDC, which make it one of the most democratic and accountable RDCs, to both shareholders and the government.

2: The context of the most recent performance review, and the magnitude of reform that is underway to improve productivity along the lines outlined above. AWI is setting an example regarding the potential to achieve productivity reform across the entire RDC model.

1: Accountability

AWI is unique in providing direct accountability to levy payers via its director election model.

RDCs are responsible for managing investment in agricultural R&D (and marketing) on behalf of the levy payers and government. The RDCs which are most likely to "self-drive" productivity reforms (to ensure the maximum benefit is received for the dollars invested) are those in which the board members are most directly accountable to levy payers.

AWI has, embedded in its constitution, a model for election of directors that is democratic and contested and which provides s*hareholders* (levy payers) with direct control over the nomination process. This was a fundamental requirement under which woolgrowers agreed to commit levy funds to the company. Anybody who has the support of 100 shareholders may run for election to the board. This stimulates scrutiny of company and director performance, constructive debate and involvement of shareholders in the selection of directors. It also means that directors can be held directly accountable to levy payers.

In other cases RDCs have nomination committees that control the nomination process on behalf of levy payers. This effectively hands control of the decision as to who may or may not stand as a candidate for election to the board over to a selected handful of people of various persuasions. In many cases nominated candidates are then are either directly appointed, or are offered up for election uncontested. Under these models, levy payers are restricted to *indirect* control over the nomination process, and director accountability to levy payers is *limited as a consequence*.

Arguments have been put that AWI's election system does not provide a "skills-based board". However, this argument is inherently flawed. It presupposes that woolgrower levy payers (the majority of whom run their own successful business enterprises) do not have the required mental capacity to select candidates with the optimal skill-sets for the board. Furthermore, it is belied by the skill set of the directors appointed to the board of AWI over the past 9 years. The current board, for example contains directors with a broad range of pertinent skills that match or exceed those of any other RDC.

Arguments have also been put that the election system is "populist" and that shareholders are vulnerable to agri-political manipulation. This second slight on woolgrowers intelligence not withstanding, the reality is that the smaller the number of people, the greater the susceptibility to manipulation or bias. Hence, a nomination committee is much more vulnerable to bias or agripolitical manipulation than the entire shareholder base of a company.

It is for this reason, perhaps, that the Australian community elects it's government representatives through an open, democratic "populist" election model rather than having them appointed by a nomination committee.

Ultimately, where-ever boards are not directly accountable to shareholders there is the potential for complacency, for autocracy, for personal or agripolitical manipulation research agendas and for lack of direct engagement with shareholders to understand and respond to their needs through delivering effective strategic direction of the company - all of which have potential negative impacts on productivity.

Science is most productive when it is conducted in a manner that stimulates "competition of ideas" and is selected based on relative scientific merit, cost and potential value return on investment, in a system that is open, consistent and transparent and free from untoward "outside" manipulation. This is best achieved through a combination of;

1: Independent boards (elected by open and contested election by the widest possible shareholder base) delivering best practice internal governance including strategy setting and performance monitoring, and providing direct accountability to government and shareholders.

2: Implementation of best practice internal research governance systems to ensure competition of ideas, and independent merit-based project selection and delivery (as outlined above).

To improve productivity, all RDCs should be encouraged to move towards direct, contested, open and democratic director election systems which provide director accountability to levy payers.

Government and agripolitical appointees *should not be included on boards*.

2: PERFORMANCE - The 2009 AWI Performance review in context, and the magnitude of productivity and governance reform that is underway at AWI

In the draft report, the commission has stated that

> "A further weakness in the current arrangement is that the sanctions available to the minister to deal with unremediated breaches of obligations by an RDC are limited".

And

> "notably, the current approach appears not to have been very effective in dealing with what are widely perceived to be significant on-going performance issues within AWI. As well as concerns about the direct impacts on the returns to levy payers and the community from AWI's R&D investments, several stakeholders pointed to the potential for unresolved performance issues within AWI to degrade confidence in the RDC model as a whole. In the commissions view, this situation should not be allowed to continue. AWIs recently renewed Statutory funding agreement and the 2009 independent review of performance detail a range of specific issues that need to be addressed by AWI. If the next 3 year independent review of performance of AWI indicates that appropriate remedial action has not been taken – and if a meaningful intermediate sanction cannot be found – then the case for the government to withdraw its funding for AWI would be compelling".

In making these statements, the commission has either misunderstood, or failed to appreciate the context of the 2009 independent performance review of AWI, and the sheer magnitude of re-structure and reform that has already been implemented and which is still continuing at AWI, A summary of which is included below and in Appendix 1.

It has been my personal experience that the board and senior management have been working "above and beyond" to implement needed reforms. Any inference of either intransigence or incompetence by the current board and senior management of the company is unfounded, uncalled for, and should be withdrawn.

As a personal position, I would like to commend the board members, senior managers and management teams, for their honest hard work, diligence, effort and commitment.

SUMMARY OF AWI PERFORMANCE AND REFORM AGENDA 2006 – 2010.

Shareholder concern regarding AWI performance and strategic direction developed In the mid 2000s and was clearly evident prior to the Nov 2008 AGM, at which shareholders voted to effect a major change in the board, with the election of 4 new directors all of whom had run for election based on a platform of ***reform***.

Performance 2003-2006

- *CONTEXT* – The company was responsible for R&D (but not marketing) and was under the management of CEO Len Stephens.
- PERFORMANCE - A positive independent review of performance was received in 2006, which particularly related to the companies investments in on-farm R&D. Dr Stephens reported that the off-farm sector had been "less successful" and that changes in strategic direction had been required in late 2004 to "improve the success of off-farm research and development" and again in 2005 and 2006 to "bring projects closer to the consumer"[viii]

Performance 2006-2009

- *CONTEXT - The period form 2006-Nov 2008 was a time of significant change for AWI*.
    - AWI merged with Woolmark in 2007. This allowed integration of R&D and marketing functions. A new CEO was appointed and a new 3 year strategic plan was announced. However, there were problems;
        - At the time of the merger, The Woolmark (and its parent company Australian Wool Services) was "not performing to woolgrowers expectations", and was "struggling financially to stay afloat with reduced Woolmark licensing fees and heavy debt burdens including $27 million associated with a UK pension fund[ix]".
        - An Animal Activist campaign was continuing against the industry
        - There was little shareholder "by-in" or "ownership" of the strategic plan
        - There was a backdrop of drought, falling sheep numbers and wool production, and a sharp decline in industry confidence.
        - Oct 2008 – Global financial crisis hit it's peak
    - By Nov 2008 shareholders were expressing major concerns regarding the financial state of the company, and the direction and governance of the R&D programmes and, in particular, the scientific accuracy of claims that effective and viable alternatives were available to support an end to mulesing by 2010.
    - *In this setting, in Nov 2008,* shareholders elected 4 new members to the board who, combined, had skills in business management, research governance, wool supply chain and marketing, and industry knowledge and experience.
- *INTERNAL PERFORMANCE ASSESSMENT by NEW BOARD Nov 2008 – Feb 2009*
    - The new board undertook a critical analysis of all facets of the company, which revealed significant challenges. Key findings are summarised in Table 1 (Appendix 1) and included financial concerns, and sub optimal governance, strategy setting and performance measurement. The most pressing of these was the financial position of the company and the need for significant structural reform. A new CEO was appointed and an extensive immediate and longer term (pre and post Woolpoll 2009) reform process was instituted. This is also outlined in Table 1, Appendix 1.
- *INDEPENDENT PERFORMANCE REVIEW 2006-2009*
    - *An independent review of performance was required prior to Woolpoll 2009. This took place 6 months after the new board was elected, and reviewed performance of the company over the preceding 3 year period.* It confirmed that there had been deficiencies (in strategy setting, governance and performance monitoring) over the 2 1/2years preceding the election of the new board, and that the new board and senior management *were in the process of addressing these issues*, (as outlined in the Table in Appendix 1).
    - There were 11 recommendations regarding ongoing measures required to deliver optimal performance.
    - AWI immediately published a response – indicating the measures that were already underway (Appendix 2) AWI also published a response regarding measures to address each of the 11 individual recommendations (Appendix 3).

- These matters were widely discussed with shareholders and stakeholders in the lead up to Woolpoll 2009, resulting in a vote of confidence in the board and management at Woolpoll and the 2009 AGM. As an example the following was published in by the NSW farmers Wool Committee in October 2009;

  "Having met with AWI and considered their response to the 3 year review of performance, the Committee believes AWI research and marketing directions are sound and funding should be maintained"[viii].

Performance 2009-2010

- CONTEXT – The process of restructure and reform has continued for a further 18 months allowing a more comprehensive set of reforms to be implemented across governance, strategy setting, performance monitoring business finance and risk management. Each of these have delivered major improvements in productivity.
  - The company has responded to and worked closely with the Government to meet performance requirements and implement reforms to successfully secure a new Statutory Funding agreement.
- ONE YEAR ON INDEPENDENT REVIEW OF PERFORMANCE.
  - A 'one-year on" independent review of performance, was recently completed. It has confirmed that AWI has acted on all 11 recommendations on improved strategy setting, planning, consultation, corporate governance, company processes and the appointment of directors and has documented the significant progress that has been achieved during this time[ix].
  - The reform process is continuing.

Today

- The company is financially secure, having restructured it's operations, secured a 2% Woolpoll levy vote in 2009 and a new SFA agreement in June 2010.
  - The SFA agreement includes improved accountability measures to government
  - Directors remain independent and directly accountable to shareholders through the direct election system enshrined in the constitution. A nomination committee will provide information and recommendation regarding candidates skill-sets to assist levy payers in their choice when electing a skills based board.
- The company has a new comprehensive 3 year strategic plan developed in consultation with, and aligned with the priorities of shareholders, stakeholders and the government
- The company has a new business model through which R&D and marketing activities are now more closely integrated to improve delivery of R&D outcomes to the marketplace, and allow improved incorporation of marketplace feedback.
- The company is investing in high impact, leveraged marketing campaigns that have contributed to grow confidence in and demand for wool, rejuvenate and build equity back into the Woolmark brand and attract new high quality Woolmark licencees,
- The company has a new research governance system that for the first time includes a contested, merit based open call process.
- Wool prices and levy income are rising on the back of increasing consumer demand and low supply and are currently at their highest levels in many years
- The decline in the national sheep flock has stabilized, the drought has broken in many parts of the country and confidence in the industry is returning.
- The company now has significantly increased available funds to re-invest in wool-related agricultural R&D and marketing, on behalf of grower and the wider community. It has implemented governance and structural reforms to ensure that these monies are invested in a manner to deliver the greatest value return on investment to producers and the wider community, with the greatest transparency, efficiency and accountability.

In summary, in the face of significant challenges and threats, the company has been though a process of major reform, that is likely to see it emerge as the "leanest" and most productive RDC with the highest levels of transparency and accountability to shareholders and the government.

APPENDIX 1 – AWI INTERNAL PERFORMANCE REVIEW AND REFORM AGENDA

(via information available on public record – see appendix 1,2 and One year on Review of performance[xi])
Blue = implemented
Green = in progress

FINDINGS NOV – DEC 2008	REFORMS WITHIN 6 MONTHS	REFORMS WITHIN 1-2 YEARS
Leadership and board governance Previous factionalisation of board had led to sub-optimal board governance	New Chairman New CEO Board voluntarily adopts improved behavioural and transparency standards. New grievance procedure and conflicts of interest policy adopted	Develop and implement formal; 1: Board operating protocols 2: Annual Board and Director performance reviews 3: Annual CEO performance review 4: Board skills matrix assessment 5: Review and update board and committee charters
Financials Projected income versus spend revealed that without radical change the company could be insolvent within 2 years.	Business restructure, cost cutting, salary rationalization, and efficiencies to ensure a balanced budget with maximum available money for R&D and marketing activities Develop risk and fraud policy	Secure, consolidate and rebuild income stream. Sucessfully complete Woolpoll and SFA renegotiation Deliver a commercially oriented business model with minimal "cost of doing business" all other income directed to marketing and R&D projects. Implement risk and fraud policy
Strategic direction The 2008-2011 strategic plan had unobtainable objectives and was misdirected based on available budget and circumstances.	New one year 2009-2010 strategic and operational plan developed and implemented, with revised targets responsive to available budget and circumstances. Woolpoll strategic engagement and preparation.	Dec 2009-June 2010 – (Post Woolpoll - and prior to SFA re-negotiation) Develop and implement; 1:A new improved *strategic planning process* with effective shareholder and stakeholder engagement and 2: *a new 3 year plan* for the company that meets the needs of stakeholder and government.
Marketing strategy and direction Not efficient or clearly defined. No co-hesive goal or global integration. Woolmark continuing to be a financial drain, brand value of Woolmark in decline	New marketing strategy and project governance and reporting regime implemented under the 1 yr operational plan. Critical analysis of marketing outcomes and Woolmark business to continue over the 1st year of the plan.	New 3 year marketing strategy and plan Identify and implement strategic and structural reforms required to deliver increased global demand for Australian wool, rebuild brand equity in Woolmark, and grow the Woolmark business Integrated measurement, and performance monitoring criteria
Research Governance - outdated, "silos", no effective "global oversight and direction" large number of projects without clear relative merit assessment or return on investment criteria Governance of "Mulesing alternatives" program not up to Australian Standards.	Comprehensive merit assessment of all R&D projects with culling of low value projects, based on R&D priorities and available budget. New project contracts to ensure compliance with all relevant R&D, ethics and welfare laws. New publications policy to ensure accuracy of scientific reporting. Integration of on and off farm R&D	Comprehensive new research governance framework with 1: Improved stakeholder input into R&D priority setting 2: Improved project governance framework including new open call process, and independent peer review and merit assessment criteria 3: Improved monitoring and feedback and return on investment critera 4: Integration btw R&D, business development and marketing teams to enhance extension and transfer of R&D outcomes.

APPENDIX 2 – AWI PRESS RELEASE IN RESPONSE TO 2009 RoP

Media Releases

Review recommends business improvements for AWI

Share Like

Monday, 31 August 2009

An independent review of Australian Wool Innovation's performance over the last three years (1 July 2006 to June 2009) has reaffirmed what many Australian woolgrowers already knew: the wool industry's marketing, research and development organisation has room for improvement.

The review is a formal obligation under the Statutory Funding Agreement (SFA) with the Australian Government. It is part of a three-year process in the lead up to WoolPoll, where AWI shareholders decide on the company's future level of funding.

Arche Consulting conducted the review and believes AWI could be more effective in the areas of strategic planning, governance, consultation and the measurement of performance.

After conducting a comprehensive line by line assessment of the company since December last year, current AWI directors have come to many of the same conclusions. The new board and management acknowledge the governance framework of the company and its subsidiaries has been inadequate over the past three years. This has resulted in an inability to set meaningful targets and objectives and to comprehensively assess the company's performance and outcomes against those objectives.

Recognising these deficiencies, present directors have made major changes to the systems within the business this year. In January, the AWI board commissioned experienced business manager and former AWI director Ken Boundy to report on the structure of the company. This was followed by the appointment of Brenda McGahan to increase marketing activities and address the funding shortfall of AWI.

In addition to an increase in marketing activity in key markets, funded by a reduction in overhead costs, on and off farm R+D have been integrated to allow a better flow of market signals.

Under Brenda McGahan's new Strategic and Operational Plan, many of the issues raised in the Review of Performance have been or are being addressed. For example, a six-monthly review of research projects. Tendering of business to increase competition and reduce costs. Project assessments have been improved and the benefits of initiatives such as the Japanese Marketing Program are now clearly outlined. The overall result is a proactive three-year R&D and extension program at AWI which is closely aligned with Australian Government research priorities. The risk management consultancy, Risk Management Partners, has been contracted to review and revise AWI's Fraud and Risk Plans.

The Board has engaged board performance advisors, Cameron Ralph, to work with it on key issues of corporate governance and to implement an improved governance framework.

The new board and management of AWI acknowledge that over the period of the review there had been inadequate consultation with shareholders and other key industry groups when determining strategy and direction for the company. The board has responded to this by significantly increasing AWI's communication with woolgrowers. So far this year the AWI CEO, chairman, directors or executives have attended close to 60 woolgrower and wool industry functions in 6 months. At these field days, shows, expos, conferences and forums AWI has listened to the views of the industry it serves.

In another example of this, next week AWI CEO Brenda McGahan will be joined by board member and topmaker Laurence Modiano at woolgrower meetings in WA, SA, Victoria and Tasmania to discuss the business. For more information visit www.wool.com/events.

AWI's revamped website also allows feedback.

The report states AWI has met its obligations through the SFA through the development and provision of plans and reports as well as regular meetings between AWI and officials of the Department of Agriculture, Fisheries and Forestry.

The review team also stated some business partners had reported an improved relationship with AWI since a more pragmatic and simpler approach to selling more wool had been adopted this year.

APPENDIX 3 –
AWI RESPONSE TO THE RECOMMENDATIONS OF THE ARCHE REPORT
PUBLISHED ON AWI WEBSITE 2009-2010

Recommendation 1: AWI work with its industry stakeholders to clearly define the company's position and role in the industry. These should then be clearly communicated to AWI's stakeholders. The recommendations of this 3 year performance review should then be considered in light of this defined role.

AWI considers that its role is to invest in R&D and marketing to protect and enhance the profitability of Australia's woolgrower shareholders. This role is clearly defined, and AWI is promoting this message to its shareholders through a range of communication channels.
AWI acknowledges that the Australian wool industry has a history of being fragmented and that confusion may exist over role clarity, and who 'speaks for the industry' on matters of significance.
AWI acknowledges the need for an improved system of communication and strategic planning for the industry as a whole, and will look to play a facilitator role to assist the wider industry achieve these aims.
AWI sees this process as being vital to support and protect the profitability of woolgrowers so that they can speak with one voice on matters of significance, and to optimise the focus and direction of AWI's R&D and marketing activities.
AWI began this process by organising shareholder and key stakeholder workshops to provide input into the current 2009/10 strategic and operational plan, which resulted in a significant change of direction and focus for the company.
AWI looks to consolidate and extend this process in the coming year.
The recommendations are considered in the above context.

Recommendation 2: Following WoolPoll 2009, AWI embark on an appropriately designed strategy setting process to provide a clear and detailed plan for the company.

The board and senior management of AWI have committed to a comprehensive strategic planning process following WoolPoll and the company's annual general meeting in November 2009.
This will involve the board, senior management, and independent external advisers and provide the opportunity for input from shareholders and key stakeholder groups in relevant areas.

Recommendation 3: AWI consider establishing internal structures to support the development and consistent implementation of a planning and evaluation process that allows rigorous exploration and assessment of value to levy payers.
AWI is committed to establishing an internal structure that delivers these objectives and this work is well underway.
AWI is currently implementing a much improved research and marketing governance framework, that is designed to deliver strategically focused and targeted programs, with improved project selection, more rigorous performance criteria and much clearer processes of evaluation to deliver transparent and rigorous assessment of value to levy payers.

Recommendation 4: AWI take steps to constructively engage shareholders and key stakeholders. AWI should work with stakeholders to establish a common understanding and shared expectations for involving the wider industry in strategy setting.

AWI is committed to developing improved communication with shareholders and stakeholders that allows for feedback and input into the key platforms of AWI's activities. Again these changes are well advanced.
AWI has been holding a series of workshops and has formed workshop-style groups for the purpose of obtaining stakeholder input into key objectives. These include strategic planning, sheep welfare, dog predation, greenhouse gas emissions, business development and marketing strategy. In addition to this, AWI has held 19 roadshows and attended approximately 50 industry events. AWI has recently launched a new website (www.wool.com) and is also consolidating on-line communication opportunities for shareholders and stakeholders.
In many cases, these workshops or workshop-style groups have been the first of such activities and are now planned on a regular basis based on positive feedback from participants, and through which AWI will be able to meet the recommendation.

Recommendation 5: AWI, as part of its strategy setting process, establish a comprehensive framework to enable the clear measurement and reporting of performance and the value it delivers to levy payers.

AWI is already implementing improved methods of measuring and reporting performance through the comprehensive improvements to business, research and marketing governance under the company's new 2009/10 operating plan.
As recommended, AWI will examine where further improvements can be made through the comprehensive strategic planning process that is planned after WoolPoll and the company's 2009 annual general meeting.

Recommendation 6: AWI review the structures and processes that operate in similar industry-owned companies, as one means of considering improvements in its value creation to levy payers.

This process is already underway. To assist in developing new and improved governance mechanisms for research, business development and marketing, AWI has examined strategic planning governance and performance measurement in similar organizations such as Meat and Livestock Australia, related industries such as wine and cotton, and organisations such as the National Heart Foundation and the National Health and Medical Research Council.
AWI will look to continue this process to ensure that it is delivering best practice value creation for levy payers.

Recommendation 7: The AWI Board comprehensively review its corporate governance practice and take steps to ensure that it meets modern expectations of good practice.

AWI acknowledges that, in the past, factionalisation of the board has resulted in suboptimal governance of the company. Since this time, however, there have been major changes on the board and the appointment of a new chairman. A new CEO has also been appointed. The current board has already adopted new and transparent policies for management of conflict of interest, and is undertaking a

review to implement improved operational protocols. The current board is united in its understanding of its role to undertake strategic planning and provide effective oversight of the management of the company to ensure that it is meeting its statutory obligations and strategic objectives.

Recommendation 8: AWI, in collaboration with shareholders and industry stakeholders, conduct a review of the architecture for the appointment of directors in the Constitution, to ensure the election of a skills based Board.

AWI's Constitution allows for board members to be elected through an open and democratic process. There is the provision to allow directors to be appointed, if the skill base of the board is inadequate. These appointed directors must then stand for election at the next annual general meeting to ensure their position is endorsed by shareholders. AWI considers that this provision more than adequately ensures AWI has access to a full skills-based board at all times.
Changing the Constitution requires 75 per cent majority.
The issue regarding whether shareholders would like to change the Constitution to provide a skills-based appointment process to the board, rather than a direct election process was canvassed at the recent industry/shareholder stakeholder workshop prior to finalising the 2009/10 strategic and operational plan.
This did not have majority support, with many growers expressing satisfaction with the current system, and concern about the potential for political manipulation of a skills-based appointment system.

Recommendation 9: AWI comprehensively review its risk, fraud and IP plans and management processes. The company should ensure that there is a common understanding of, and responsibility for, the plans, and that they are embedded in company operations.

AWI is currently in the process of reviewing its risk, fraud and IP plans and management processes. This review is being undertaken by independent experts and is expected to be completed within weeks, following which AWI will be ensuring that they are embedded in company operations in fulfilment of this recommendation.

Recommendation 10: AWI comprehensively document and communicate the actions the company is currently taking to improve business processes.
AWI has already begun to document and communicate the actions that are underway to improve the company's business processes, and will continue to expand this reporting over the coming 12 months as the new, comprehensive strategic planning process, objective setting and governance frameworks are consolidated and implemented.

Recommendation 11: A formal review be conducted in 12 months time to assess AWI's progress in addressing the recommendations of this review. This will enable AWI to make appropriate changes well in advance of the levy poll in 2012.
AWI will consider a review in 12 months' time to assess progress.

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