Grain Industry Association of Western Australia

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GIWA

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SUBMISSION TO THE PRODUCTIVITY COMMISSION
Rural Research and Development Corporations
Public inquiry

Introduction

The Grain Industry Association of Western Australia **(GIWA)** was established in 2008 to represent the interests of the grains industry across the supply chain. It was formed through an alliance of NACMA WA, Oilseeds WA, the Western Oat Alliance, the Western Region Barley Council and Pulse WA.

GIWA members emanate from all grain supply chain sectors and include grain growers, consultants, processors, storage and handlers and government.

GIWA's objective is to facilitate a grains industry that is profitable in the long term. It is pro-active in identifying issues and developing responses on critical issues for the grains industry. It services cover:

- Policy Development;
- Identifying and overcoming supply chain constraints;
- Communicating with industry;
- Conducting industry forums on key issues and themes; and
- Advocacy for the industry at a state and national level.

GIWA believes that continued and focused investment in R&D for the grain industry is vital.

The grains industry is undergoing substantial structural reform. The Commonwealth Government deregulated export wheat marketing in June 2008, and, from November 2009, there is no export market regulation for barley, lupins and canola in Western Australia. GIWA supports the deregulation of export marketing and recognises the need for ongoing reform of the industry.

GIWA's aim is to ensure that the grains industry is internationally competitive and responsive to changing market requirements. State and Federal Governments should support initiatives that are in the long term interests of the grains industry. GIWA believes the government and industry need to work collaboratively to establish a national organisation that delivers market information and 'industry good' functions. GIWA is pro-actively working with industry on these issues in Western Australia.

Precompetitive industry good functions include issues such as market information, receival standards, quality assurance, Biosecurity, varietal classification, international trade regulation, logistics, industry ethics, technical market support and **Agronomic R&D**. These functions benefit the industry and all Australians.

One of our major competitors is the USA and the United States Wheat Associates (USW) has been in existence since 1959 to develop and expand the United States' export markets. The USW provides assistance to US wheat buyers, millers, wheat food processors and government officials around the world. USW roles include industry strategic planning, product development, research and development, wheat variety classification and crop shaping activities.

Scale of R&D in the grain industry in relation to value of production

The total value of grain production in Western Australia is estimated at around $3.2 billion per year. Typically Western Australia produces around 11 million tonnes of grain each year. Of this production around 90 percent is exported. WA historically has produced about 40 to 50% of Australia's annual grain production.

Australia produces around 6 to 8 million tonnes of hay and silage each year. Of this production around 600,000 to 700,000 tonne is exported, mainly from Western Australia. Hay further diversifies income as well as providing agronomic benefits such as control of herbicide resistant weeds.

The total value of fodder production in Australia is around $2.9 billion (ABS 2008/09). To support this industry an R&D program dedicated to fodder is managed by RIRDC. At present this program spends approximately $600,000 pa primarily on plant breeding and fodder quality research.

R&D Investment in the Grain Industry

GIWA believes that continued and focused investment in R&D for the grain industry is vital to ensure sustainable future grain (food) production in Australia. Without significant investment in R&D, particularly on farm production, the grain industry in Australia will decline over time.

Our major competitors the USA and Canada, who export grain to our key Asian markets, are world leaders and invest significant amounts in research. It is suggested that this review examines how these grain industries have been able to benefit from investment in R&D and how their R&D investments are managed.

For the Grain Industry to remain competitive with the North Americans, R&D investment in production and other supply chain issues is vital. Threats to production such as the increasing cost of non renewable resources such as fuel and fertiliser, diseases, weeds and insect pests are constantly evolving requiring a constant stream of new varieties and changing technology . The Grain Industry also needs to address natural resource management issues such as climate change, frost, soil erosion, soil health, plant nutrients, and salinity.

GIWA is also concerned about the limited funding for fodder R&D. Export hay is a significant high quality product developed for specific export markets and is especially important to Western Australia.

GIWA believes that in principle investment in R&D should be supported by everyone who benefits from a grain (or fodder) supply chain - including farmers, plant breeders, input suppliers, traders, marketers, processors and consumers. As there are numerous and diverse beneficiaries, there is a strong case based on efficiency grounds, for all Australian tax payers to contribute.

Therefore GIWA endorses the current system of a grower levy and matching contributions by Government. There appears to be sound justification to consider extending the levy system to cover R&D in other sectors of the supply chain. Such a system could have the potential to fund precompetitive industry good R&D for the entire supply chain. This would ensure that all sectors are able to operate at maximum levels of efficiency and the industry is able to tackle major rate limiting supply chain functions in order to benefit the entire industry.

Tony Critch
Chairman

Comment on Issues and Questions

(PC questions summarized in italics)

Is Government investment in R&D for the Grain Industry justified?

GIWA believes that a similar investment by the Government in the Grain and Fodder Industry is justified.

Tax payers in Australia benefit from a strong primary industry and food production sector. Without Government funding disparate individuals and businesses who benefit from the grain and other associated agricultural industries mostly have limited methods to significantly invest in R&D.

Is the RDC model fundamentally sound?

In general terms GIWA strongly supports the efforts of the Grains Research and Development Corporation (GRDC). Our general observation is that GRDC is effective and valued by the majority of industry. The effectiveness of GRDC compared to other R&D investment models is beyond GIWA's current knowledge. We are supportive of the PC developing options for R&D funding models that are efficient and effective and comparing these to current arrangements. GIWA would be pleased to comment on the relative merits of the options developed from such a review.

Is there sufficient oversight of, and coordination and collaboration between RDCs?

It is a GIWA opinion that communication between the RDCs and to end users of their results could be significantly improved. We are aware that there are collaborative across sector RDC programs such as the Grain and Graze program that are collaborative and this is to be applauded. However we believe more needs to be done in this regard as GIWA believes that overlap in research over time and between states is far too common.

GIWA is of the opinion that details of current and past projects (who, where, what & results) could be much more readily accessible/visible on a common database on a common website. In particular more information on current research being conducted would be likely to assist reduction of duplication of effort, encourage increased understanding by industry members and increase the adoption of results.

Is the framework sufficiently flexible to accommodate future changes in circumstances and requirements?

GIWA believes that the framework is not sufficiently flexible to allow for investment in R&D to address issues across the whole Grain Industry supply chain and hence is overly pre occupied with on farm R&D. More investment in R&D in the areas of market development, logistics improvements, processing/value adding technology and more involvement in market and end user issues is recommended.

Is there sufficient emphasis on the evaluation of outcomes and sharing the lessons learned?

GIWA does not believe that there is sufficient emphasis on measuring and evaluating project outcomes.

An increased emphasis on project reporting detailing the economic benefits (on and off farm) of the project results is suggested.

GIWA is aware of projects that have benefited the grain industry in WA. These projects have resulted in significantly improved agronomy for crops, new genetic plant material, increased scientific capacity, improved rural leadership capacity and stronger regional networks amongst other very significant benefits.

Capacity building

GIWA believes that the support by GRDC to improve the capacity of growers, and scientists is important. PhD scholarships and other endeavours to increase capacity in areas where there is a shortage of expertise are acknowledged as providing significant benefits for the industry GRDC has supported conferences to encourage knowledge transfer to growers and advisers at such events in Western Australia as Crop Updates and the Grains West Expo. It also supports technical workshops for sustainable grain production, and numerous projects where consultants and agribusiness companies, run demonstration trials to increase growers' knowledge and encourage production.

GRDC also supports a series of supply chain projects to improve leadership capability such as the Australian Rural Leadership Program, the Nuffield Scholarship Program, the Grain Innovators Program, and the Science and Innovation Awards for Young People in Agriculture. Support for young people is critical in the agricultural sector where there have been difficulties in retaining and attracting new entrants into the industry.

Capacity building has a spill over benefit to other industries when "up skilled scientists" move from the agricultural sector to other sectors that then benefit from their knowledge.

According to Agtrans Research in 'An Economic Analysis of GRDC Investment in Aspects of Capacity Building' the estimated benefit-cost ratio over 30 years from such activities is 4.2:1.

GRDC has to GIWA's knowledge supported many communication activities including: sponsoring industry and academic conferences, funding grower group alliances, research publications and newsletter distribution to industry stakeholders.

For example, GIWA via Oilseeds WA was supported to provide advice to industry during the development stages of the Canola Industry. During the time when the existing "sylvestris gene" based varieties were threatened by blackleg, GRDC support was instrumental in funding forums for growers to learn about the threat and which varieties had lost their resistance. GRDC also supported the production of Growing Western Canola which summarises the agronomy for canola for existing and new growers to industry. This booklet is available on the Oilseeds Federation Website and the Western Australian Department of Agriculture and Food websites.

Another example in WA is where GRDC and industry collectively funded the varieties update for all grains in 2009. The update was attended by 80 specialist agronomists.

Genetic resources

Investment in pre-competitive genetic resource projects is essential to provide new genetic material to increase production, overcome a production constraint or provide a defence against disease, pest or weeds.

Having significant financial capacity to fund large 'big picture' projects is needed, especially for production of new varieties to tackle threats of disease, pests and to provide systems such as Triazine tolerant and Round Up Ready Canola, frost and drought resistance etc. For example it does not appear to be well known, that GRDC has invested in International research such as CIMMYT, based in Mexico,

which keeps us on an even keel with our competitors when it comes to acquiring germplasm to guard against new diseases etc, such as UG99 which could become a disaster to the grain industry when it arrives in Western Australia. The time it takes to develop a new variety from germplasm can be around 20 years, hence a compelling need to "Invest for the Future'.

The Grain Industry has also been concerned with environmental constraints including climate change. GRDC has supported projects to address greenhouse gas emissions, increasing soil carbon, improved weather forecasting and developing management approaches to minimise frost and heat stress.

Agtrans Research indicated that the benefit-cost ratio for GRDC investment in this area was estimated to be 1.8: 1 over 25 years.

An example of this type of research in WA is the GRDC funded UWA project, 'Fertiliser Management Strategies for Decreasing On-Farm Greenhouse Gas Emissions', aims to determine if carbon dioxide emissions can be reduced by using grain legumes (in this case, lupins) to replace some of the urea traditionally used to add nitrogen to the soil and if Nitrous oxide emissions can be reduced by applying lime to raise soil pH. The private sector is highly unlikely to invest in this type of research. Significant impositions could be placed on agriculture because of climate change that it would not be in a position to adjust without this type of research being funded by GRDC.

Soil nutrition/biology

Soil condition/soil health is a vital concern to growers.

GRDC has supported important projects on maintaining ground cover and organic matter in soils, balancing the application of inputs to maintain soil fertility, managing soil borne diseases for healthy plant growth, soil structural stability and overcoming or managing soil constraints.

GRDC has supported a program on the use of microbial inoculants to increase crop yields. According to the GRDC Impact Assessment on the Soil Biology Program (http://www.grdc.com.au/uploads/documents/GRDC_ImpAss_SoilBiology1.pdf) in September 2009, the benefit to cost for GRDC investment in this area has been estimated to be 4 : 1 over 30 years.
GIWA believes significant research has been funded in this area and it would benefit from an industry review to guide further projects on this topic.

Some specific strengths and weaknesses of the RDC model
It is that there is a growing tension between the requirements of levy payers and of the Australian Government. Not unreasonably, the former wish to see their contributions spent on R&D (and extension) of direct benefit to the industry concerned. However, the Australian Government is increasingly seeking to encourage the RDCs to undertake cross-sector or so-called 'cross cutting' R&D of benefit beyond the industry (as well as more downstream supply chain research where the benefits to primary producers may be less immediately apparent).

GIWA encourages the PC to fully investigate the results of projects and to form its own opinion on the value of past research to various grain supply chain sectors and to consider the benefits of investment in R&D for the entire grain supply chain and beyond the production sector. We believe this is a critical investigation that is urgently needed. Especially the need for industry and governments to develop strategies and funding mechanisms to provide for precompetitive industry good functions that used to be undertaken by the former monopolies (e.g. AWB and in WA the Grain Pool) in the Grain Industry.

Government (via government departments) has an understandable bias to direct funds to politically sensitive objectives. This does not always lead to the greatest gains for the nation as a whole. One of the strengths of the RDC model is that it appears less subject to political objectives and more inclusive of commercial interests.

Although GIWA is of the opinion that more dollars need to be directed to the key supply chain issues/blockages/rate limiting functions it recognizes that GRDC has invested in projects that have resulted in increased Australian scientific capacity, improved rural and remote regional leadership capacity, stronger rural and regional networks and industry input into government policy

GRDC projects have also focused on human health issues through R&D on the avoidance of chemical use by farmers, more healthy grain products such as high oleic canola oils and promotion of grain as a healthy food.

They have also addressed the broader communities concerns over adaptation to climate change, storing more carbon in soils, healthy soils, reduction of soil erosion and the sustainable production of food. It is this last point that is arguably where the grain industry most greatly benefits the community. It is an easily overlooked fact that the more efficient the food production is then the more people who are able to work in secondary and tertiary sectors.

It may be that such tensions and concerns (to the extent they are valid) can be satisfactorily resolved through changes to the detailed configuration of the RDC model (see section 6).

Further leveraging contributions from industry partners should be further considered. It potentially creates stronger ownership of effort and results and provides incentive for proponents to produce highly useable results. In principle this should be more vigorously pursued with institutions and government project partners as well as private corporations.

Or can deficiencies in the model be addressed through more minor modifications to the current requirements? If more fundamental changes might be warranted, what form could these take? How difficult would it be to replicate the strengths of the RDC model within such approaches? Is there scope for 'halfway' house approaches that would harness the respective strengths of the RDC model and alternatives to it? Are there any overseas approaches that are particularly instructive? Are there other major changes required to the role of the RDCs? For example: Do the current levy payment and governance arrangements for the RDCs lead to an excessive focus on R&D effort within the 'farm gate'

GIWA recommends that project proposals be assessed to determine who the benefices of the research are and are they sharing in the cost of the research?

There are opportunities for high returns from research conducted in all sectors of the supply chain. At present there is insufficient funding for precompetitive industry good research for the post farm gate sector. It is our belief that in the past this was left to the former grain marketing monopolies that have been abolished. Now grain marketers have tended to be replaced by grain traders who will spend little on research (e.g. market development) and then only on R&D that is in house and that yields immediate commercial returns for the corporation.

If State Governments continue to wind back their role in R&D and extension, should the RDCs be seeking to fill the gap, or are there private players that could effectively fill this role?

In Western Australia there are independent consultants and advisers employed by agribusiness companies effectively providing extension direct to growers. However a gap exists between the communication of cutting edge research and these operators. RDCs have a legitimate role in funding the gap between researchers and these operators so that both parties can effectively communicate with each other.

Most Western Australia's larger grain growers now employ at least one consultant and in many cases several to advise on farm management, agronomy and marketing. Agribusiness companies such as Elders, Landmark and CRT still provide agronomic advice although the continuation of this service appears to be under pressure. Farmer driven grower groups assist by providing trials and extension of research information to district growers.

GRDC aims to fund this gap by providing such services as Crop Updates and Market Updates to insure that the extension sector is well informed on the latest research results. There is a need to continue to fund this activity in partnership with government departments. The funding of overall industry development is also a legitimate role for RDCs.

Improving the levy arrangements

What are the relative merits of compulsory and voluntary levies for addressing free-rider problems?

Voluntary levies are not effective in generating sufficient funds.

For example in the Fodder Industry the funding for R&D comes from a voluntary R&D levy on the export of hay (most of which is produced in Western Australia). Each year hay exporters contribute $0.50 per tonne towards the RIRDC program. Despite many attempts by the national body the Australian Fodder Industry Association (AFIA) to gain similar voluntary contributions from domestic producers, the RIRDC program still relies on funding from a small part of the industry.

Hay exporters are justifiably questioning why they should be carrying the research programs when the other 90 percent of production benefits from the outcomes of the R&D projects.

Key international competitors in our export markets are the United States and Canada. To compete with these countries, Western Australian producers need R&D to address many issues in our existing systems including hay and oat breeding, chemicals registrations for production, Chemical residue surveys and Fodder testing.

Should processors generally pay a levy for R&D? If they were required to do so, what is the likelihood that they would simply pass the cost back down the line to the primary producer?

Processors and other post farm gate operators are in some cases already contributing voluntary contributions to various industry good bodies. Hence a precedent is set. Their ability to pass the cost back down the line is likely to vary depending on when and how the levy is extracted.

GIWA believes that in principle investment in R&D should be made by everyone who benefits from a grain (or fodder) supply chain including farmers, plant breeders, input suppliers, traders, marketers, processors and consumers.

A specific proposal as to how a levy was applied and collected on post and pre farm gate sectors would need to be detailed and put to these sectors to ascertain the support for and impact of such a levy.

Is there any evidence of a significant mismatch between the regional distribution of levy payments and the regional distribution of the benefits from the ensuing R&D, for particular RDCs or across the program as a whole? Would an explicit effort to more closely align the two materially reduce the overall return to the community from the RDC program?

This has always been the perception in West Australia. The following table illustrates the evidence for this view.

In 08 - 11 the following expenditure splits was reported by GRDC

The most recent sources are:
GRDC Annual Report 2008/09: http://www.grdc.com.au/reports/ar2009
Which places funding by Regions:
Western Region - $34.2m (32.2%)
Southern region - $48.8m (45.9%)
Northern region - $23.3m (23.3%)

and the GRDC Stakeholders Report 2010/11:
http://www.grdc.com.au/uploads/documents/GRDC%20Stakeholder%20Report%202010-11.pdf
Which places funding by Panel:
Western Panel - $20.4m (16%)
Sth Panel - $28.2m
Nth Panel - $14.6
National Panel - $64.7m
In recent years the % of production from WA has been consistently > 40%.