

SECTION 4
**GRDC
REPORT TO
INDUSTRY**

The Grains Research and Development Corporation and *Australian Grain* present this special *Report to Industry* as well as an easy to follow guide to your research levies at work for current and on-going projects. The strategic direction of GRDC investments is outlined while the Regional Panels report on major projects underway in your patch.

Individual GRDC projects are indexed (see page 71) and listed according to their relevant commodity group (wheat, coarse grains, oilseeds, pulses or pastures) or under the cross-commodity heading in the case of research covering several grain groups. If you would like to follow-up on any projects, key researcher contact details are also provided.



Lloyd O'Connell, Editor, *Australian Grain*

Strategic R&D investments to keep growers competitive

In a nutshell, the GRDC's role is to strategically invest and manage your research levies and Australian Government co-contributions. We aim to produce new information and products that enhance the productivity, competitiveness and environmental sustainability of grain growers and the grain industry generally while benefiting the wider community.

Careful planning is required to achieve these outcomes – planning that is made particularly challenging by ever changing climatic, business and marketing environments.

Like all successful businesses, the GRDC periodically sets various goals and plans so your invested dollars are



**Peter Reading,
Managing Director**



**Keith Perrett,
Chairman**

accurately aimed at favourable end results. Our strategic investment sights are set well beyond the next financial year or cropping season. The 2009–10 year is the third year of the GRDC's current five-year strategic R&D Plan, *Prosperity through Innovation*.

Key drivers of *Prosperity through Innovation* include water availability, productivity

growth, growers' terms of trade, grain market dynamics, customer expectations and farm demographics. The plan also encourages stakeholders and research partners to meet clearly defined performance measures and outcomes.

Our key priorities in coming months include working to improve grains industry productivity and to help the industry adapt to the effects of climate change; establishing a new wheat classification system; protecting the industry from exotic pest and disease incursions; building industry and research capacity; and progressing the development of a National Grains Research Development & Extension Strategy.

We are particularly focused on increasing the speed of development and adoption of existing technologies and providing an effective path to market for new technologies.

Investment strategy

At the end of the day we need Australian growers adopting technologies and practices to help them remain globally competitive.

To ensure our strategies remain relevant, we continually monitor and review changes in the business and grain industry environment. Investment priorities are established jointly with industry, government and our research partners. We act in partnership with public and private researchers, other R&D funding organisations, agribusiness people, grower groups and individual growers.

And each year we tailor our investment portfolio to best address current grain grower and Australian Government priorities as well as national and international developments in agricultural technologies.

Put simply, the GRDC invests in grains research where

How the GRDC is funded

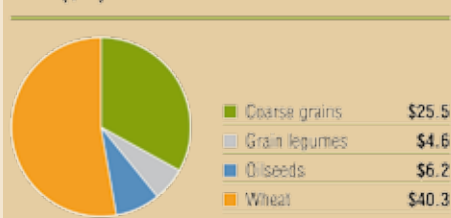
The quality and extent of Australian grains research, extension and education is envied throughout the world. The unique method of public and industry research funding, national coordination and structure – and ultimately extension – provides continuing scientific and management breakthroughs for grain growers. This translates into productivity gains essential in maintaining competitiveness in world markets. Depending on seasonal conditions, the grains industry invests around \$100 million each year through the GRDC on research.

This is funded by a combination of:

- growers paying a statutory levy of 0.99 percent of the net farm gate value of grain produced (maize is levied at 0.693 percent); and,
- a sliding scale of matching contributions paid by taxpayers via the Australian Government. Depending on the prevailing market value of the various grains, this sliding scale means the government contributes around 30–40 percent of the total levies collected.

The Australian Government matches the levy income up to a maximum of 0.5 percent of the gross value of grains production, provided the government contribution does not exceed grower levies.

Where 2007–08 research levies came from (\$m)



difficulties to the industry's progress exist. This means allocating available funds across a range of investment areas.

In the current financial year, the GRDC has budgeted for more than \$108 million in total R&D investments – a 22 per cent increase on 2007–08. Projected investment allocations across the regions in 2008–09 are: Northern \$28.95 million; Southern \$48.70 million; and, Western \$30.93 million.

In the 2009–10 financial year, estimated R&D expenditure is budgeted to again increase to \$118.4 million.

Investment priorities in 2009–10 are part of the GRDC's core strategy of a national approach to grains R&D to help reduce duplication and fragmentation.

Key investment priorities for 2009–10 include:

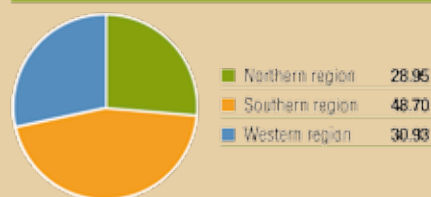
- Climate change – seeking to further understand impacts in order to minimise risk and maximise opportunities, including leading investment in soil carbon sequestration, management of nitrous oxide emissions and adaptation of crops to climate change.
- Greenhouse gas emissions – further measurement of paddock-based greenhouse gas emissions from grain production systems, to improve life-cycle analyses for a range of crops and environments and help enable better targeting of greenhouse gas mitigation practices.
- Collaboration with other Research & Development Corporations (RDCs) – continue to develop through a range of co-investment, coordination and communication activities aimed at increasing the efficiency and effectiveness of R&D investments. We are developing a new collaboration with the Cotton RDC addressing productivity and climate change preparedness in cotton and grain farming systems.
- Biosecurity – collaborative project involving the CRC for National Plant Biosecurity and the Australian Quarantine and Inspection Service, to examine the extent to which plant pathogens might enter Australia via passengers returning from overseas.
- Wheat classification – supporting the ongoing classification of new wheat varieties.
- Nutrient management – developing, demonstrating and evaluating new ways to ensure full nutrient availability for crops in above-average seasons while minimising the risks associated with early fertiliser application in poor years.

- Extension opportunities and training – implementation of the GRDC Extension Plan; investment in training initiatives on three key issues – precision agriculture, on-farm grain storage and spray drift management.
- Barley breeding – developing a productive, profitable and sustainable Australian barley industry supported by the release of commercially successful, market-targeted, elite cultivars of malting and feed barley.
- Development of enhanced germplasm – establishing national facilities for the phenotyping of complex water productivity traits in winter cereals.
- Lupin breeding – supporting the delivery of genetically modified herbicide-tolerant lupins that will diversify and increase the sustainability of farming systems while contributing to the revival of the lupin industry.
- New food products – identify and develop opportunities for partnering with companies to bring several new grain food products to market including the high-amylose ...62 ▷

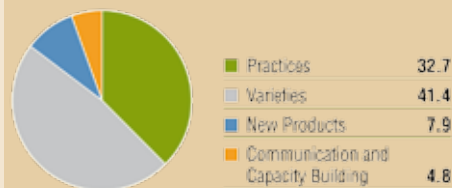
Where your research dollars are invested

For the current (2008–09) financial year the GRDC has budgeted to spend more than \$108 million on projected R,D&E investments across the three regions.

GRDC Investments in 2008–09 by region (\$m)

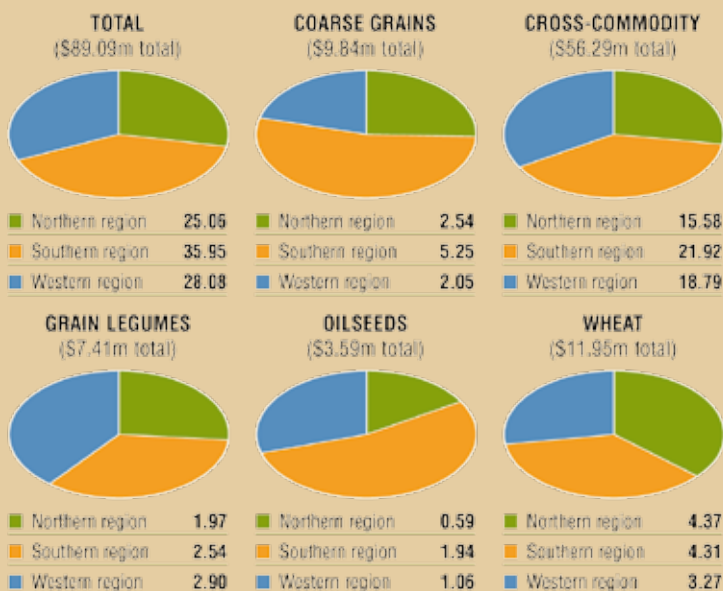


GRDC Investments in 2007–08 by Line of Business (\$m)



The system of joint statutory collections raised over \$125 million in 2007–08 which was in turn invested back into the industry via the funding of hundreds of research projects.

Where your 2007–08 research dollars were invested (\$m)



The GRDC supports the development of GM lupins to help revive the lupin industry.

<61...STRATEGIC R&D

- wheat joint venture; the coeliac-friendly barley project; and, Go Grains Health and Nutrition Ltd.
- New feed products – further develop and commercialise near-infrared (NIR) technology; improve the yield and digestibility of sorghum; examine the potential for wheat and barley lines with novel carbohydrate compositions to increase the digestibility of grains and reduce methane gas production in cattle.
 - International collaboration – supporting valuable international alliances and investments, such as a contractual agreement and investments with the International Maize and Wheat Improvement Center (CIMMYT) in Mexico, the Global Crop Diversity Trust and the Australian Centre for International Agricultural Research.
 - Industry and research capacity building – building skills, training and education in agriculture. This will include investment in the Primary Industry Centre for Science

Leviable crops

The 25 leviable grain crops are:

- Wheat;
- Coarse grains (barley, oats, sorghum, maize, triticale, millets/panicums, cereal rye and canary seed);
- Pulses (lupins, field peas, chickpeas, faba beans, vetch, peanuts, mung beans, navy beans, pigeon peas, cowpeas and lentils); and
- Oilseeds (canola, sunflower, soybean, safflower and linseed).

Education which aims to encourage senior high school students to consider careers in agriculture and environmental sciences.

Having your say!

There are various ways you can have your say about anything to do with the GRDC, including general or specific research direction.

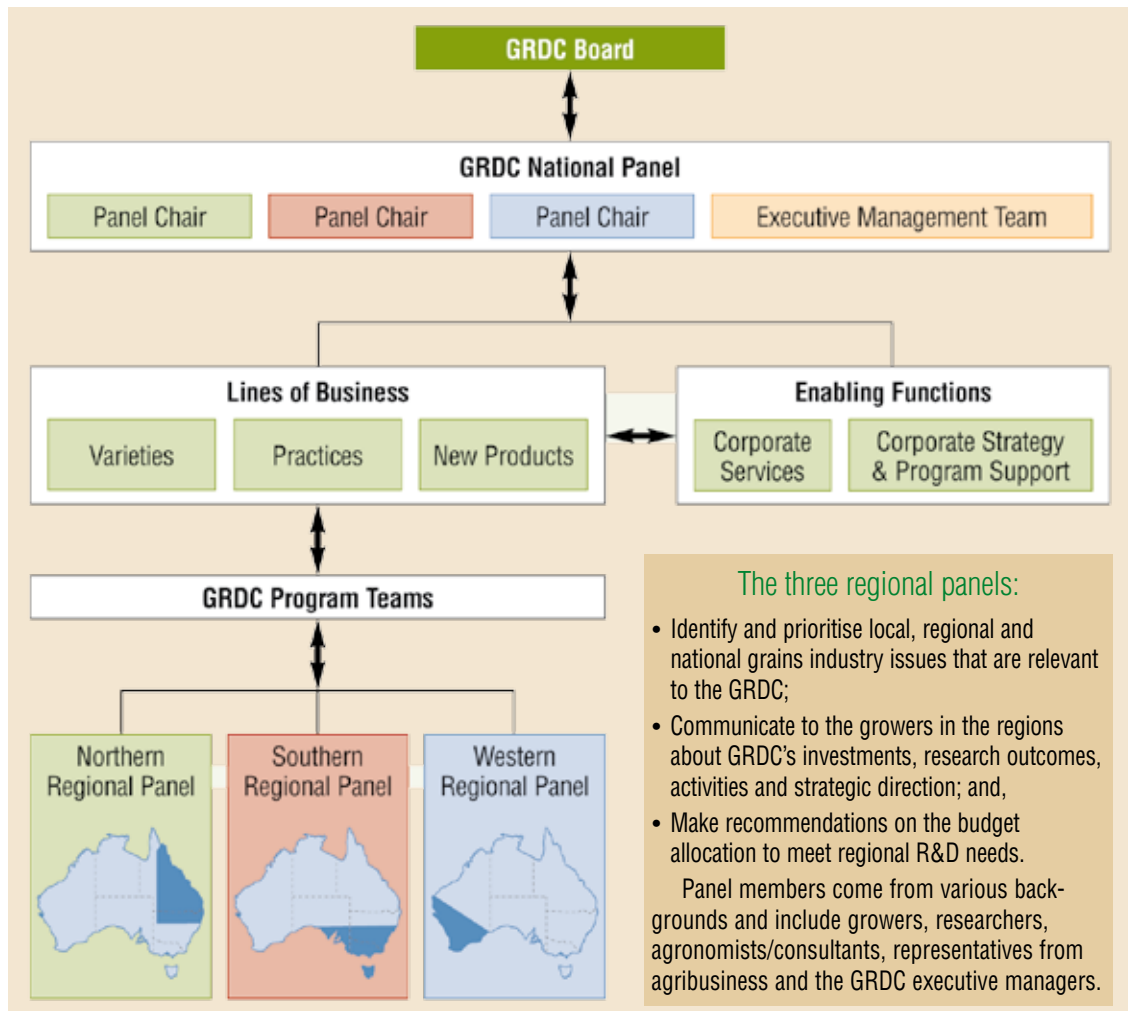
New ideas are the life-blood of the grains industry. Regional panel members are always happy to hear from you, and in response to requests from many growers, this *Grain Yearbook* has a review from each of the Regional Chairs detailing the GRDC supported R&D work underway in your local area.

The GRDC's E-Concept initiative also provides a formal mechanism for anyone, at anytime, to put forward an idea to the corporation for consideration. The E-Concept is available to both the public and private sectors (see the GRDC website for more details www.grdc.com.au).

The GRDC's achievements depend on the effective and timely implementation of the corporation's strategies, which in turn depends on the cooperation of the Board, panel members and staff, and strong relationships with research partners and growers.

Our sincere thanks for your significant contributions to grains industry R&D.

**Keith Perrett, Chair
Peter Reading, Managing Director**



The three regional panels:

- Identify and prioritise local, regional and national grains industry issues that are relevant to the GRDC;
- Communicate to the growers in the regions about GRDC's investments, research outcomes, activities and strategic direction; and,
- Make recommendations on the budget allocation to meet regional R&D needs.

Panel members come from various backgrounds and include growers, researchers, agronomists/consultants, representatives from agribusiness and the GRDC executive managers.