



Australian Government

Grains Research and
Development Corporation

GRDC
STAKEHOLDER REPORT
2010-11



GRDC

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Corporation

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1. Executive Summary

The GRDC Stakeholder Report 2010-11 is a formal planning and reporting tool designed to provide crucial information to the Grains Council of Australia (GCA) and its affiliates. It is part of a suite of formal and informal measures GRDC utilises to ensure effective communication and accountability to Australian grain growers. In conjunction with the *GRDC Annual Report* and *GRDC Growers' Report* it provides an overview of GRDC activities, key achievements and an analysis of revenue and expenditure estimates for 2010-11. This information is provided to enable GCA to make an informed decision and recommendation on the GRDC levy rate for 2010-11.

A priority for GRDC is the effective engagement with its grower stakeholders and demonstrating the measures taken to ensure it is accountable to growers. GRDC has a comprehensive system of engagement with growers and works at all levels to ensure growers can identify emerging issues and have direct input into determining the research, development and extension (RD&E) priorities of the organisation.

Investments planned in 2010-11 are aligned with the GRDC's corporate strategies, Line of Business (LOB) strategies and regional grower and Australian Government priorities. With the current challenges facing the industry — including the need to drive productivity, increasing global food demand, potential adverse impacts of climate change and the implementation of a national grains RD&E strategy — the GRDC has planned to significantly increase investment in 2010-11 to address these challenges.

The projected revenue and expenditure forecast for 2010-11 is also outlined in this report. GRDC's current forecast is based on wheat production of 21.9mt and barley production of 8.0mt for 2010-11 with revenue estimated at \$124.8 million. Actual revenue will depend on the volume of crop production, grain price fluctuations, the value of the Australian dollar, significant shifts away from grains in the farm business mix, the degree of on-farm storage, the proportion of the crop sold into pools and the payment terms of pools selected by growers. The volume of crop production is very much dependent on seasonal conditions during the growing season, drought or other weather events, pest or disease outbreaks. Following the restrictive environment caused by drought in recent years expenditure is projected to increase to \$146.4 million in 2010-11.

The GCA is required to recommend the levy rate to the Minister for Agriculture Fisheries and Forestry each year. The amount of levy revenue received each year depends on a number of risks as outlined. These factors all impact on GRDC's ability to fund R&D for a profitable and environmentally sustainable grains industry. The GRDC has carefully managed its reserves to maintain research expenditure and capacity during recent drought events and ensure that its investments and partnerships continue to deliver value to grain growers.

Based on current revenue and expenditure forecasts and the level of accumulated reserves, the GRDC recommends that the levy rate of 0.99 percent be maintained for all leviable crops (excluding maize which should be maintained at 0.693 percent).

2. Grower Engagement and GRDC Accountability

The GRDC works closely with its two key customer groups: Australian grain growers and the Australian Government.

Grain grower interests are represented through the GRDC's national and regional panels, and through the consultation and reporting relationships established between the GRDC and the Grains Council of Australia (GCA).

GRDC has a comprehensive system of engagement with growers and works at all levels to ensure growers can identify emerging issues and have direct input into determining the RD&E priorities of the organisation. GRDC welcomes feedback from the industry and actively engages in extensive consultation with the Australian grains industry through formal and informal channels.

These channels include financial support of the Regional Advisory Committees, Regional Panels, growers on the GRDC Board, a comprehensive national system of Grower and Adviser Updates, panel and Board tours throughout growing areas, attendance at field days, consultation and support with grower groups, farming system groups and industry associations and participation at industry conferences, workshops and forums.

The GRDC Stakeholder Report 2010-11 is a formal planning and reporting tool designed to provide crucial information to the Grains Council of Australia and its affiliates. It is part of a suite of formal and informal measures GRDC utilises to ensure effective communication and accountability to Australian grain growers.

There is a comprehensive system of accountability and reporting obligations for the GRDC, reflecting its obligations under the PIERD (Primary Industries and Energy Research and Development) Act, and as set out under the CAC (Commonwealth Authorities and Companies) Act.

A system of accountability and reporting obligations for the GRDC, reflecting its obligations under the PIERD Act, is set out under the CAC Act. Under the CAC Act, the GRDC is obliged to:

- prepare an annual report (in the prescribed form, including a report of operations), and to give it to the responsible minister by 15 October each year (section 9)
- ensure that any subsidiary's financial statements are audited by the Auditor-General and provide them to the responsible minister by 15 October each year (section 12(1))
- prepare and provide to the responsible minister interim reports during a financial year, if required by the Finance Minister by notice in the Gazette (section 13)
- prepare and provide budget estimates (section 14)
- provide the responsible minister (in writing) with particulars of any proposal of the GRDC to undertake any one of a number of significant events (section 15)
- keep the responsible minister informed of the operations of the GRDC and its subsidiaries and provide such reports, documents and information as that minister or the Finance Minister requires (section 16)

- ensure that the general policies of the Australian Government as notified to the corporation and applicable General Policy Orders made by the Finance Minister are carried out (sections 28 and 48A).

Table 1 shows the elements of the approach the GRDC adopts to meet its corporate planning and reporting obligations as a statutory corporation.

Table 1: Elements of the planning and reporting approach

| Element | Purpose |
|----------------------------|--|
| Annual operational plan | Specifies the annual budget, resources and research priorities that give effect to the strategic R&D plan during a given financial year |
| Annual procurement plan | Makes procurement information publicly available through the Australian Government's AusTender procurement management web site |
| Annual report | Provides information on R&D activities and their performance in relation to the goals set in the annual operational plan and portfolio budget statement for a given financial year |
| Growers' report | Provides performance information to growers on R&D activities for a given financial year |
| Investment plan | Informs potential research partners about some of the GRDC's new investment priorities for the next financial year and invites interested parties to submit research proposals |
| Portfolio budget statement | As part of the Australian Government budget process, summarises the planned outputs, outcomes, performance information and financial statements for a given financial year |
| Stakeholder report | Meets legislative requirements for reporting to the grains industry's representative organisation, the Grains Council of Australia |
| Strategic R&D plan | Sets out the GRDC's high-level goals, strategies and performance measures for a five-year period, developed in consultation with stakeholders and approved by the Minister |

This report also includes the *GRDC Growers' Report 2008-09* (Attachment A) specifically developed to provide key performance information and is sent to all growers. This provides a concise summary of the achievements and activities of the Corporation during the year including:

- ✓ Report from the Chair and Managing Director (page 3)
- ✓ GRDC financials at a glance (page 7)
- ✓ Reports from the GRDC regions (page 8)
- ✓ Investment highlights of Varieties, Practices, New Products, Communication and Capacity Output Groups (page 14)
- ✓ Commercialisation (page 28)
- ✓ The GRDC Team (page 29)
- ✓ The GRDC Board (page 31)
- ✓ The GRDC investment process timeline (page 32)

3. GRDC Strategy

The GRDC determines its investment priorities jointly with industry, government and research partners and acts in partnership with private and public researchers, other R&D funding organisations, agribusiness, and grain grower groups.

The unique method of public and industry research funding, national coordination and extension provides continuing scientific and management breakthroughs for grain growers. This translates into productivity gains essential in maintaining competitiveness in world markets.

The GRDC's primary objective is to support effective competition by Australian grain growers in global grain markets, through enhanced profitability and sustainability. Figure 1 shows how GRDC's four corporate strategies and associated Line of Business (LOB) strategies support the primary objective. This is achieved by four underlying strategies:

1. Firstly, and most importantly, the role of GRDC is to coordinate and facilitate a national approach to grains R&D.
2. Secondly, it is critical to deliver against the Australian Government priorities. The Australian Government is our second biggest customer contributing about 40% of GRDC funding.
3. The third key strategy is to grow and leverage the total investment in grains R&D. This involves co-investing with our R&D partners, collaboration and co-investing with other RDCs, leveraging additional funding sources such as the government's Caring for Country program, and investing with private sector enterprise.
4. Finally all R&D must be market driven. By this we mean four things:
 - the R&D must have clearly defined outputs/deliverables that will benefit the Australian grains industry
 - there must be whole of industry involvement in determining the R&D agenda
 - where the primary beneficiaries of the R&D outcome are post farm gate, these beneficiaries should contribute to the R&D
 - the GRDC will work with private capital partners where this involvement enables a technology to be brought to growers in a more effective way.

2010-11 is the fourth year of implementation of the GRDC's Strategic R&D Plan 2007-12. Proposed investments for 2010-11 are aligned with the GRDC's corporate strategies, LOB strategies and regional grower and Australian Government (including responsible Minister) priorities.

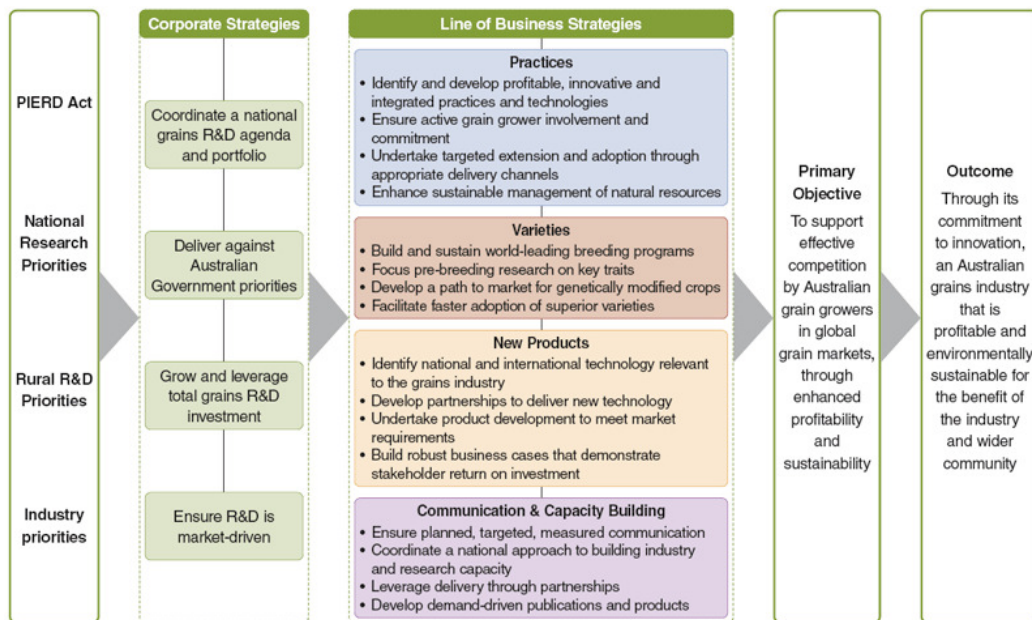


Figure 1: Overview of R&D strategies, 2007-12

To ensure that its strategies remain relevant, the GRDC continually monitors and reviews changes in its business environment. Factors that are expected to influence the business environment include:

- the continuing need for greater understanding of both the impact of agriculture on greenhouse gas emissions and climate change and the impact of climate change on agriculture
- the continuing importance of demonstrating the impact of R&D on productivity and sustainability
- continuing change in the characteristics of the Australian and global grain markets, including changes to grain-marketing arrangements, the global recession, global food security issues and high levels of volatility in grain prices and input costs
- continuing progress on developing a National Grains RD&E Strategy.

Informed by its five-year strategies and by business conditions, the GRDC each year tailors its investment portfolio to best address:

- Australian grain grower priorities, as identified through consultation meetings held with the Grains Council of Australia, local research advisory committees, grower groups, grower organisations and individual grain growers.
- Australian Government priorities, as identified by the National Research Priorities and Rural R&D Priorities and Minister's priorities
- national and international developments in agricultural technologies.

4. Projected 2010-11 Budget Analysis

Overview

GRDC's revenue and expense budget is highly dependent on crop production and prices. Given the uncertainty in these factors, the GRDC may need to revise estimates during the year. Grains production estimates and prices are derived from data sourced from the Australian Bureau of Agricultural and Resource Economics (ABARE), Australian Crop Forecasters (ACF), Profarmer, and other appropriate agencies. GRDC also consults regularly with the Levies Revenue Service in the Australian Government Department of Agriculture, Fisheries and Forestry and agricultural consultants to validate levy revenue projections. Based on current estimates revenue for 2010-11 is forecast at \$124.8 million. This is made up of \$63.0 million from the industry levy, \$47.1 million from the Australian Government, \$2.2 million in grants, and \$12.5 million from ancillary revenue sources. This assumes 'status quo' levy rates and production levels of approximately 21.9mt of wheat and 8.0mt of barley.

Expenditure is governed by expected revenue and GRDC's ongoing commitments in order to maintain future research capacity. Total expenditure in 2010-11 is estimated at \$146.4 million with investment in research and development of \$133.2 million.

Revenue Forecast

Table 2 shows the GRDC's revenue and expenditure estimate for 2009-10 and 2010-11, based on Attachment B – GRDC Revenue Forecast Assumptions. Projected revenue in 2010-11 is based on the levy rate of 0.99 percent of net farm gate value of all grains except for maize¹ and continuance of the prevailing Australian Government contribution. At this stage, GRDC's 2010-11 revenue is estimated at \$124.8 million. This estimate is highly dependent on the volume of grains production, grain prices, the proportion being sold into pools versus the cash market, the degree of on-farm storage, and the payment terms of pools selected by growers.

¹ Levy rate for maize is at 0.693 percent

Table 2: Indicative Revenue and Expenditure Forecast 2009-10 to 2010-11(\$m)²

| | Forecast | |
|--|--------------|--------------|
| | 2009-10 | 2010-11 |
| Grain Grower Levy | 72.3 | 63.0 |
| Australian Government ^a | 50.4 | 47.1 |
| Grants ^f | 5.6 | 2.2 |
| Interest, Royalty & Other ^b | 9.0 | 12.5 |
| Total Revenue^c | 137.2 | 124.8 |
| Ongoing Commitments | 97.5 | 95.8 |
| New Research Investment | 24.7 | 37.4 |
| Employees | 6.6 | 6.9 |
| Suppliers | 6.1 | 6.3 |
| Total Expenditure | 134.9 | 146.4 |
| Surplus/Deficit | 2.4 | -21.6 |
| Gross Reserves ^d | 121.0 | 99.4 |
| <i>Less Property Plant & Equipment</i> | 6.3 | 6.2 |
| <i>Less Shares in unlisted companies</i> | 7.5 | 6.7 |
| Liquid Reserves^e | 107.3 | 86.6 |
| 40% Lower Reserves Limit | 59.9 | 53.7 |

^a GRDC's levy revenue is matched by the Australian Government at a level up to 0.5 percent of the gross value of grains production (three year rolling average), provided the Government contribution does not exceed grower levies for the relevant year.

^b "Other" includes penalties, project refunds. 2009-10 includes adjustments in investment valuations.

^c Indicative revenue in 2009-10 and 2010-11 is highly dependent upon the volume of grains production, prices and grain marketing arrangements.

^d Gross reserves means net assets (ie total assets less total liabilities).

^e Liquid reserves are net assets which are easily convertible to cash.

^f Grants are contributions from other organisations for implementation of R&D programs

² Figures are subject to rounding differences

The proportional break-up of the GRDC's forecast revenue for 2010-11 is shown in Figure 2.

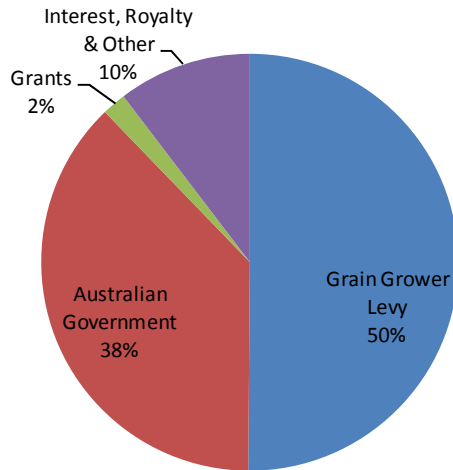


Figure 2: Break up of GRDC's Forecast Revenue for 2010-11 as a Percentage of Total Revenue

Expenditure

Currently GRDC is in a strong position to increase R&D expenditure. Planned expenditure for 2010-11 is \$146.4 million. This is an increase of \$11.6 million on forecast total GRDC expenditure in 2009-10. The percentage break-up of this into new investment, ongoing commitments, employees and suppliers is shown in Figure 3. It is estimated that \$37.4 million will be invested in new research commitments; \$95.8 million on ongoing research commitments, and \$13.2 million for employee and supplier expenses.

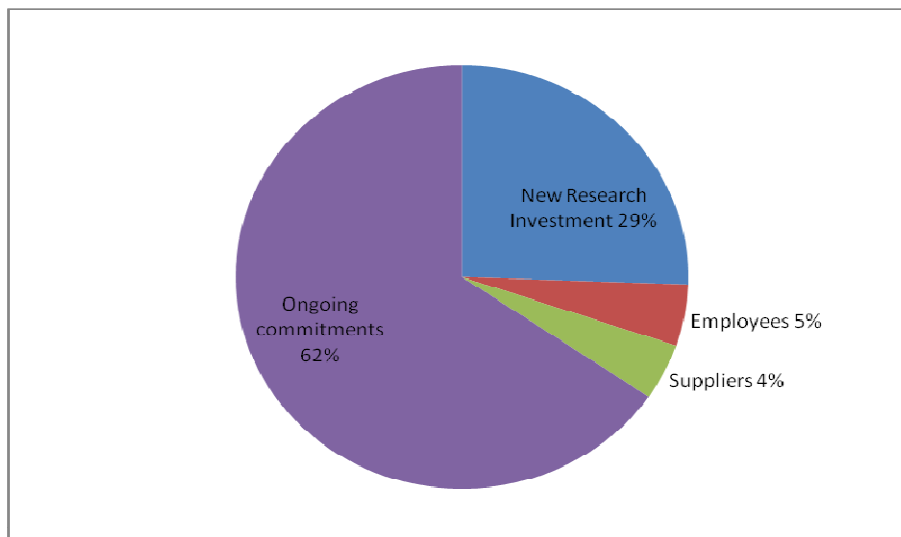


Figure 3: Break-up of the GRDC's Expenditure for 2010-11 as a Percentage of Total Expenditure

New Research Investment

Following the constraints of recent droughts on R&D expenditure, GRDC is now expecting to significantly increase investment in 2010-11. GRDC is currently in the process of finalising its investment plan for 2010-11 which we will invite the Minister to approve in early 2010. Proposed investments are aligned with the Corporation's Strategic R&D Plan 2007-12. In developing investment priorities, regional panels (refer to page 6 and 29 of the Growers' Report) consulted extensively with growers and researchers through regional advisory committees, linkage groups and site visits. Drafting of the priorities presented in the Investment Plan 2010-11 began in early 2009 and took into account new investments being made in 2009-10, progress reports on existing investments, project reviews and other sources such as outputs from technical workshops. Panel members and GRDC management identified gaps in the GRDC portfolio and scientific opportunities which were incorporated into priority development for 2010-11.

New investment is allocated towards GRDC's programs of agronomy and soils, extension and grower programs, crop protection, new farm products, new grain products, germplasm enhancement, gene discovery, and communications and capacity building. Some of the new investments include:

- **Increasing yield in wheat:** This investment will be used to fast track exciting new technologies developed by GRDC and CSIRO aimed at increasing the yield in wheat to a point where a commercial partnership can be formed to deliver those technologies to the Australian grains industry.
- **Grower Group Alliance:** This investment will carry on from the current project fostering relationships between grower groups and the research community in Western Australia that encourages information sharing of recognised capabilities to facilitate technology access and delivery.
- **National Variety Trials Program Round Two:** The National Variety Trials (NVT) is the largest independent crop evaluation program in the world – with over 590 trials at over 250 locations across Australia. NVT is a national program of comparative crop variety testing that provides grain growers, agronomists and consultants with independent and accurate information about how varieties perform in their region. This additional investment will increase the quality of data delivered resulting in growers making better varietal selection decisions. This will in turn drive faster adoption of new varieties.
- **Managing climate variability III (MCV):** Managing Climate Variability is a national program helping farmers manage climate risk by improving forecasting accuracy and developing practical tools to incorporate weather and climate information into farm business decisions. This investment is the third phase of this program. MCV III is a partnership across RDCs and aims to foster improved climate risk management amongst the agricultural sector, and position Australian agriculture to adapt to changing climate through practical responses.
- **National invertebrate pest initiative III:** This is an expansion of the current initiative. The aim of this project is to develop better pest management options in grain farming systems. This will be achieved through better networking of researchers, prioritisation of invertebrate pest management research, delivery of on-farm demonstrations of pest

management strategies and new technologies, and providing more trained entomologists through targeted postgraduate projects.

- ***Germplasm enhancement for improved frost tolerance in wheat and barley:*** This investment will focus on developing and implementing a national research plan that will accelerate the delivery of germplasm with enhanced frost resistance and molecular markers for frost tolerance to wheat and barley breeders.
- ***Development of pulses with better adaptation to water-limiting environments:*** The aim of this investment is to identify germplasm that is better adapted to water-limiting environments so that breeders can incorporate this trait into new varieties and give growers more certainty in yields when growing pulse crops.
- ***Profitable crop sequencing:*** The key objectives of this investment are to achieve quantitative and measurable improvements in crop production, farm profitability and resource condition through better use of crop sequencing in selected regions. The project will facilitate capacity building and empowerment of the agricultural community by participating in research and development, and accessing information and training available from the full spectrum of GRDC-supported research.
- ***Western region integrated disease management:*** This investment will develop integrated disease management communication and training packages, increase knowledge of the biology of crop diseases, and provide diagnostic, forecasting and related information services to growers and advisers on the probable risks of endemic diseases.
- ***Crown rot germplasm enhancement for wheat and barley:*** This investment will look into developing genetic technologies to combat the increasing incidence of crown rot.
- ***Western region integrated weeds management and herbicide resistance:*** The aims of this investment will include the development of new techniques for weed seed reduction, development of guidelines on alternative herbicide mixtures to reduce dependence on trifluralin and phenoxy herbicides, and development of management practices for new emergent problem weeds.

Ongoing Commitments

GRDC manages approximately 600 ongoing projects. The GRDC's total expenditure budget for 2010-11 for ongoing commitments is \$95.8 million which represents 62 percent of expenditure (shown in Figure 3). This proportion has decreased from 2009-10 largely due to the significant increase in proposed new investment in 2010-11.

Examples of GRDC continuing investments with a particular emphasis on grain grower priorities are outlined in Table 3.

Table 3: Examples of GRDC continuing investments

| Grain grower priorities | Examples of GRDC continuing investments |
|--|---|
| Environmental | |
| Responses to climate change | <ul style="list-style-type: none"> • Mainstreaming a climate theme across the GRDC output groups, focusing on adaptation to climate change and mitigation of greenhouse gas emissions in the Australian grains industry to enhance: <ul style="list-style-type: none"> – understanding of the likely impacts of climate change on the grains industry and on individual growers – understanding of the relationships between crop yield, carbon dioxide, temperature and rainfall – understanding of the points in crop production where greenhouse gas emissions require most attention – ability of growers to plan for possible future management options. |
| Improved water use efficiency | <ul style="list-style-type: none"> • Work to further evaluate the potential of farm-scale rainfall radars to enhance on-farm decision making. • Participatory farming systems research, development and extension activities to identify and address productivity constraints and enable growers to consistently push yields to the available water limit. |
| Sustainability and resource management | <ul style="list-style-type: none"> • A national program to assist growers to ensure full nutrient availability for crops in above-average seasons, while minimising the risks associated with early fertiliser application in poor years, including by: <ul style="list-style-type: none"> – developing and testing ways to budget for nutrients across rotations and make better use of soil stores and novel sources of nutrients – improving the effectiveness and economics of soil and plant testing – improving the nutrient management skill level within the industry |
| Soil health and biology | <ul style="list-style-type: none"> – building on the foundation of knowledge generated by the GRDC's Soil Biology Initiative to exploit the multiple benefits of soil biology in grain production systems. • A project to develop a compendium and interactive decision support software to improve grower and adviser knowledge and management of soil-, fertiliser- and legume-based nitrogen in farming systems. |
| Farm management | |
| Integrated farming practices and technologies | <ul style="list-style-type: none"> • Research to determine whether beneficial predation on invertebrate crop pests is increased if remnant vegetation is included in a cropping landscape, and whether this may assist integrated pest management approaches to reduce pesticide use at a landscape scale. |
| Integrated management of weeds, diseases and pests | <ul style="list-style-type: none"> • A project to determine the resistance of diamondback moth to an array of synthetic and biological insecticides. • A training project to deliver new knowledge on pests and beneficial species and demonstrate integrated control strategies through farm-scale demonstrations and field days. |
| Herbicide resistance management | <ul style="list-style-type: none"> • Research to enhance the sustainability and profitability of central Queensland farming systems through improved weed and seed-bank management. • Collaboration with a harvester manufacturer to achieve a non-chemical method of weed seed collection, separation and destruction at harvest. • Research to improve weed control options in conservation farming systems, to better manage hard-to-control weeds such as herbicide-resistant ryegrass, wild oats and brome grass. • A project to improve weed control, use herbicides more efficiently and reduce the risk of yield loss from herbicide damage in sensitive |

| Grain grower priorities | Examples of GRDC continuing investments |
|---|---|
| | <p>winter crop cultivars.</p> <ul style="list-style-type: none"> • Work to reduce the impact of herbicide resistance in Western Australian crop production systems by developing integrated weed management options for annual ryegrass and wild radish management in lupins. |
| Variety development | |
| <p>Biotechnology for improving genetic gain</p> | <ul style="list-style-type: none"> • Research to develop high-density molecular marker reference maps for Australia's major pulse crops, providing information on priority traits that will enhance the efficiency and competitiveness of Pulse Breeding Australia. • Work to finalise the introduction of crown rot resistance into durum wheat, through the use of molecular marker and cytogenetic technologies. • A project to identify wheat germplasm with greatly improved efficiency in carbon dioxide fixation, which may lead to more efficient and sustainable production by reducing requirements for water and nitrogenous fertiliser. • A project seeking to improve frost tolerance in wheat by further characterising two potential sources of frost tolerance and examining the stability, magnitude and heritability of frost tolerance observed in synthetic wheat derivatives. • Support for nationally coordinated phenotyping facilities, in strategic locations around Australia, to examine complex physiological traits such as water use efficiency under field conditions. • Research to deliver wheat germplasm with novel sources of resistance to stripe rust, yellow leaf spot and crown rot, together with appropriate molecular markers, to Australian wheat-breeding programs. • A range of projects seeking to improve the efficiency of nitrogen and phosphorus uptake and use in wheat and barley. • A project to develop dual-purpose bread wheat with qualities suitable for sponge and dough bread making in Asia and for rapid dough bread making in Australia. • Collaboration with Chinese research partners to explore new germplasm, genes and breeding technology to extend the barley crop to marginal soils, including by identifying and characterising novel barley germplasm suitable for acid soils, frost, salinity and low rainfall. |
| <p>Superior new varieties</p> | <ul style="list-style-type: none"> • A project to increase yields of canola and field peas in the high-rainfall zone by developing better management practices for current varieties and introducing new adapted genotypes. • A project to develop advanced maize germplasm for tropical Australia, with improved yield and quality suitable for both irrigated and dryland production systems. |
| New and innovative product development | |
| | <ul style="list-style-type: none"> • A scoping study to assess the potential to extract key nutrients from waste for processing into agricultural fertiliser, using a range of technologies. • A project to increase export demand for high-value Australian wheat by identifying the optimum Australian wheat traits for the production of high-quality noodles in China. • A project to produce new insecticidal classes based on natural peptides isolated from spider toxin. • Research to develop new products for the control of rust and other fungal pathogens in cereals, based on plant biopolymers. • Work to accelerate the evaluation of a nitrogen use efficiency gene in wheat and to fast-track its delivery to breeding programs. • Research to produce a new range of beneficial soil microbes for use as biological control agents or plant growth enhancers. |

| Grain grower priorities | Examples of GRDC continuing investments |
|---|---|
| | <ul style="list-style-type: none"> • A feasibility study exploring the use of microbial enzyme biotechnology for the production of synthetic fertilisers • Work to validate the use of near-infrared calibrations to predict the energy available from feed grains for different animals—including pigs, chickens, cattle and sheep—to provide an objective assessment of feed grain quality that will inform an effective feed grain trading system. |
| Capacity building | |
| Improving skills, training and education in agriculture | <ul style="list-style-type: none"> • Three annual scholarships offered by the Australian Nuffield Farming Scholars Association, to support young and innovative growers, researchers and other industry representatives with strong leadership potential, and build research capacity in the grains industry. |
| Farm business management | <ul style="list-style-type: none"> • A project to improve farm business management techniques by working with rural advisers and accountants to strengthen their engagement with growers. |

Employee and Supplier Expenses³

Employee and supplier expenses in 2010-11 have been projected to increase marginally compared with 2009-10. However employee and supplier expenses as a proportion of the GRDC's total expenditure have declined, indicating the maintenance of strong economies of scale.

Expenditure by Panels and Lines of Business/Output Groups

Figure 4 shows the percentage break-up of proposed 2010-11 R&D investment among the GRDC Panels. Please refer to page 6 of the Growers' Report for an explanation of the panel system and how it is used to ensure investments meet the interests of GRDC stakeholders. The National Panel investments comprise the national components of the GRDC's R&D investment across Australia. Figure 5 shows the percentage break-up of proposed 2010-11 R&D investment among the GRDC Lines of Business (LOB)/Output Groups. Key performance indicators for GRDC's output groups are published in the Corporation's Strategic R&D Plan 2007-12 (pages 21-29).

³ Employee expense is employee remuneration. Suppliers' expense is the cost of the supply of goods and services, which primarily includes panel and program team support and depreciation

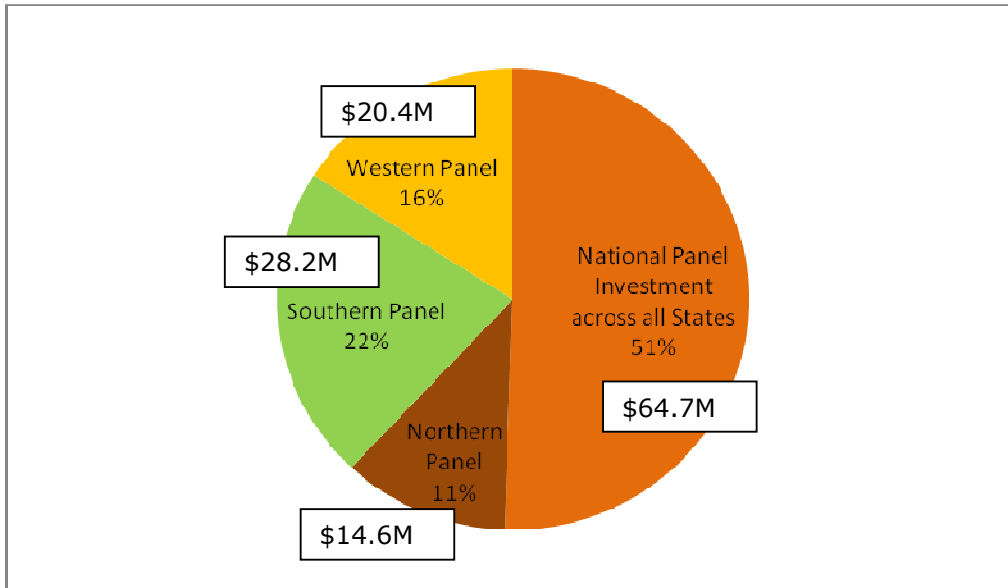


Figure 4: 2010-11 Proposed R&D Investment by Panels

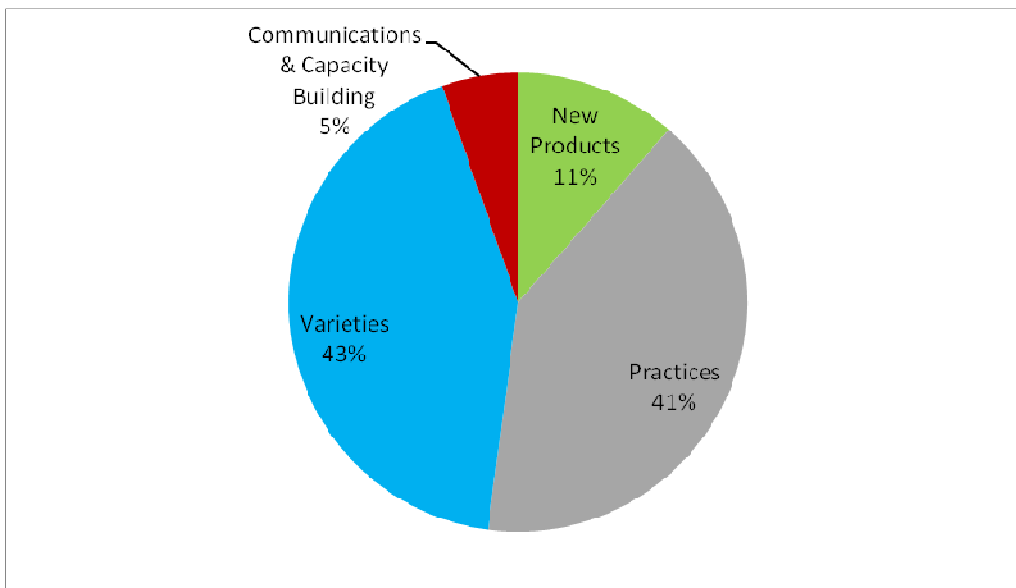


Figure 5: 2010-11 Proposed R&D Investment by Line of Business/Output Groups

Sensitivity Analysis

GRDC's forecast revenue estimate is primarily dependent on production levels, grain prices, and growers' marketing intentions. Given the uncertainty in these variables, GRDC undertakes sensitivity analysis to examine the impact of the baseline and a plausible pessimistic scenario on GRDC reserves and its ability to maintain satisfactory research capacity. GRDC aims to manage its liquid reserves between an upper limit of 70% and lower limit of 40% of the following year's expenditure.

Table 4 shows the results of the sensitivity analysis and the underlying assumptions which were varied.

Table 4: Sensitivity Analysis on Forecasted Revenue 2010-11

| | Units | Baseline ⁴ | | Scenario 1 ⁴ | |
|------------------------------|-------|-----------------------|---------|-------------------------|---------|
| | | 2009-10 | 2010-11 | 2009-10 | 2010-11 |
| Projected Revenue | \$m | 137.2 | 124.8 | 137.2 | 106.2 |
| Expenditure | \$m | 134.9 | 146.4 | 134.9 | 146.4 |
| Surplus/Deficit | \$m | 2.4 | -21.6 | 2.4 | -40.2 |
| Liquid Reserves ⁵ | \$m | 107.3 | 86.6 | 107.3 | 67.9 |

Variables Changed

| | Units | Baseline | Scenario 1 |
|-------------------------------|-------|----------|------------|
| Wheat Production in 2010-11 | mt | 21.9 | 11.3 |
| Barley Production in 2010-11 | mt | 8.0 | 4.7 |
| Sorghum Production in 2010-11 | mt | 1.4 | 1.3 |
| Canola Production in 2010-11 | mt | 1.6 | 0.8 |
| Oats Production in 2010-11 | mt | 1.2 | 0.8 |
| Wheat Price (APW) in 2010-11 | \$ | 235 | 282 |
| Wheat Price (APH) in 2010-11 | \$ | 259 | 310 |
| Malt Barley Price in 2010-11 | \$ | 205 | 246 |
| Feed Barley Price in 2010-11 | \$ | 185 | 222 |
| Sorghum Price in 2010-11 | \$ | 212 | 254 |
| Canola Price in 2010-11 | \$ | 443 | 532 |
| Oats Price in 2010-11 | \$ | 216 | 259 |

Baseline

The baseline scenario outlined above assumes a 0.99 percent levy rate on net farm gate value for 24 grains and a 0.693 percent levy rate on net farm gate value for maize, and an expenditure of \$134.9 million in 2009-10 and \$146.4 million in 2010-11. The baseline scenario (referred to as the Base Case) is depicted in Figure 6 below.

The baseline shows projected revenue of \$137.2 million in 2009-10 and \$124.8 million in 2010-11. The reduction in revenue is due to lower cash and pool prices for grain. As part of GRDC's strategy to maintain reserves within the target policy range a deficit has been estimated and liquid reserves decrease to \$86.6 million in 2010-11.

⁴ Figures are subject to rounding differences

⁵ Liquid reserves are net assets which are easily convertible to cash

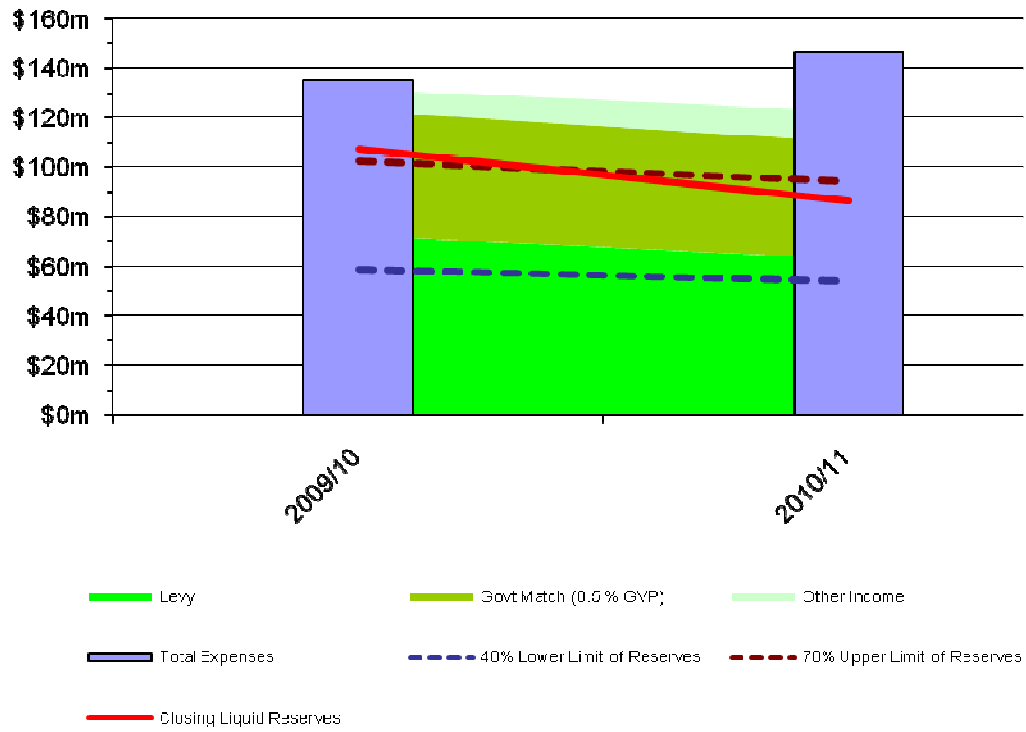


Figure 6: Base Case Scenario

Scenario 1

Scenario 1 assumes a pessimistic scenario for 2010-11 with crop production reflecting averages from the previous three drought years. Prices for the major crops of wheat, barley, sorghum, canola, and oats are assumed to be 20 percent higher than the baseline prices.

This scenario shows projected revenue of \$137.2 million in 2009-10 and \$106.2 million in 2010-11 (refer Table 4). Liquid reserves decrease to \$67.9 million. As can be seen in Figure 7 reserves are still within the target range of GRDC's reserves policy in this pessimistic scenario.

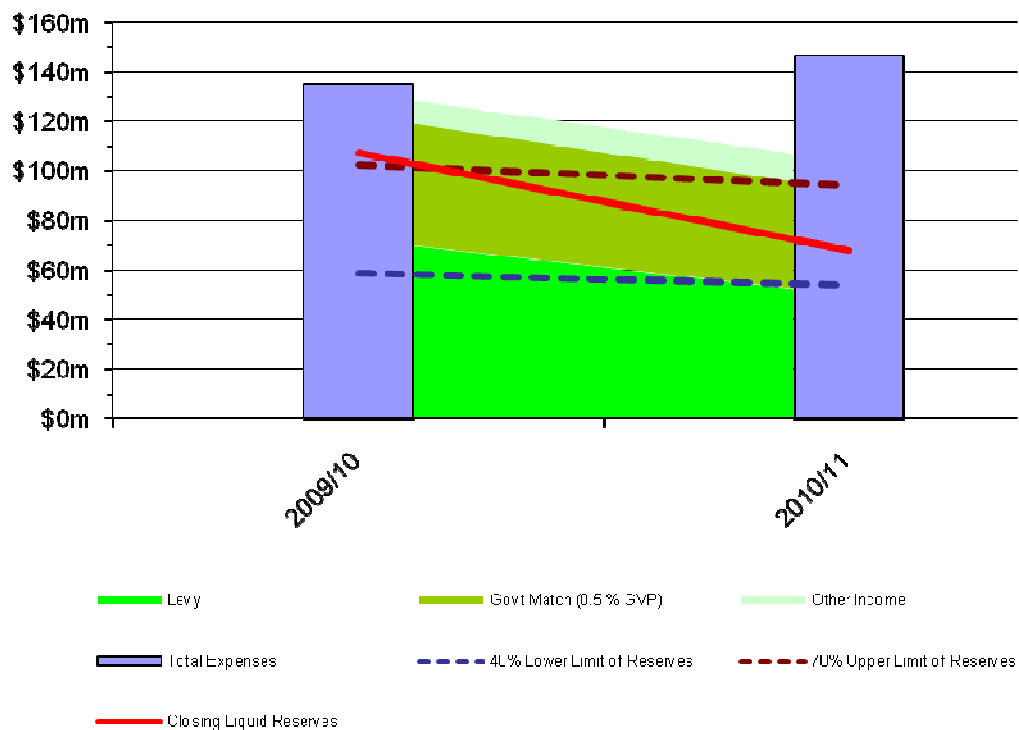


Figure 7: Scenario 1

5. The Proposed Grains Levy Rate for 2010-11

The GRDC's enabling legislation states that the levy is to be reviewed each year 'by the representative organisation' which the Minister has nominated as the Grains Council of Australia (GCA). Currently, the levy rate is 0.99 percent of net farm gate value for 24 grains and 0.693 percent of net farm gate value for maize.

The levy rate of 0.99 percent has remained steady since 1991. The amount of levy revenue received each year depends on a number of risks including drought or other weather events, pest or disease outbreaks, grain price fluctuations, the value of the Australian dollar, and significant shifts away from grains in the farm business mix. Increasing trends towards delayed sales and on-farm storage can also have a material effect on GRDC levy receipts. These factors all impact on GRDC's ability to fund R&D for a profitable and environmentally sustainable grains industry.

The GRDC manages these fluctuations through accumulation of reserves in years of high value production and utilising these reserves in leaner years when revenue is lower. Revenues are expected to be lower in 2010-11 relative to 2009-10 however GRDC plans to increase its investment in R&D through utilisation of its reserves. GRDC is required to manage its reserves in accordance with the CAC Act and organisational financial policy. The GRDC has carefully managed its reserves to maintain research expenditure and capacity during recent drought events and ensure that its investments and partnerships continue to deliver value to grain growers.

The stable levy rate and the GRDC's financial reserves have allowed the GRDC to safeguard the industry's research investment in a volatile environment. A fluctuating levy rate may result in a more conservative and possibly limited approach to investment, consequently reducing benefits currently flowing to grain growers and the wider community.

In consideration of the opportunities to deliver value to grain growers, the ongoing industry challenges, and the determination of the GRDC to implement the current Strategic R&D Plan 2007-12 and the LOB Strategies, the GRDC recommends a continuation of the levy rate of 0.99 percent for 24 grains and 0.693 percent for maize in 2010-11.

Attachment A – GRDC Growers' Report 2008-09

Attachment B - GRDC Revenue Forecast Assumptions

GRDC's baseline revenue forecast for 2009-10 and 2010-11 is based on the production and price estimates shown in Table B1.

Table B1 GRDC's Price & Production Assumptions - 2009-10 and 2010-11

| Production (mt) | 2009-10 | 2010-11 |
|------------------------|----------------|----------------|
| Wheat | 21.7 | 21.9 |
| Barley | 7.4 | 8.0 |
| Sorghum | 1.2 | 1.4 |
| Canola | 1.9 | 1.6 |
| Oats | 1.1 | 1.2 |
| Prices (\$/t) | 2009-10 | 2010-11 |
| Wheat-APW – Pool | 252 | 235 |
| Wheat-APW – Cash | 214 | 235 |
| Wheat-APH – Pool | 274 | 259 |
| Wheat-APH – Cash | 235 | 259 |
| Feed Barley – Pool | 167 | 185 |
| Feed Barley – Cash | 163 | 185 |
| Malting Barley – Pool | 212 | 205 |
| Malting Barley – Cash | 212 | 205 |
| Sorghum | 222 | 212 |
| Canola | 400 | 443 |
| Oats | 183 | 216 |

Sources:

| Production (mt) | 2009-10 | 2010-11 |
|------------------------|--------------------------------|---|
| Wheat | ACF ⁶ February 2010 | ABARE Australian Commodities March quarter 2010 |
| Barley | | |
| Sorghum | | |
| Canola | | |
| Oats | | |
| Prices (\$/t) | | |
| Wheat-APW –Pool | ACF February 2010 | ABARE Australian Commodities March quarter 2010 |
| Wheat –APW-Cash | | |
| Wheat-APH – Pool | | |
| Wheat-APH – Cash | | |
| Feed Barley – Pool | | |
| Feed Barley – Cash | | |
| Malting Barley- Pool | | |
| Malting Barley- Cash | | |
| Sorghum | | |
| Canola | | |
| Oats | | |

⁶ Australian Crop Forecasters