



Australian Government

Grains Research and  
Development Corporation

**GRDC**  
**STAKEHOLDER REPORT**  
2009-10



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## Table of Contents

<b>1. Executive Summary</b>	<b>4</b>
<b>2. Growers' Report 2007-08</b>	<b>5</b>
<b>3. Projected 2009-10 Budget Analysis</b>	<b>6</b>
<i>Overview</i>	6
<i>Revenue Forecast</i>	7
<i>Expenditure</i>	8
New Research Investment	8
Ongoing Commitments	9
Employee and Supplier Expenses	11
Expenditure by Panels and Lines of Business/Output Groups	11
<i>Sensitivity Analysis</i>	13
Baseline	14
Scenario 1	14
<b>4. The Proposed Grains Levy Rate for 2009-10</b>	<b>15</b>
<b>Attachment A – Growers' Report 2007-08</b>	
<b>Attachment B – GRDC Revenue Forecast Assumptions</b>	

# 1. Executive Summary

This 2009-10 Stakeholder Report should be read in conjunction with the 2007-08 Growers' Report.

Section 2 refers to the Growers' Report, which highlights the Grains Research and Development Corporation's (GRDC) key achievements in 2007-08.

Section 3 focuses on the projected revenue and expenditure budget for 2009-10. GRDC's current forecast is based on wheat production of 20.0mt and barley production of 6.8mt for 2009-10 with revenue estimated at \$137.5 million. Actual revenue will depend on the volume of crop production, grain prices, 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. Total expenditure in 2009-10 is proposed to be \$131.1 million.

Section 4 discusses the proposed levy rate for 2009-10 and the factors which will impact on GRDC's ability to fund R&D for a profitable and environmentally sustainable grains industry. 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. Growers' Report 2007-08

In November 2008 the GRDC released its Growers' Report for 2007-08. This provides a concise summary of the achievements and activities of the Corporation during the year. The Growers' Report is provided at **Attachment A** and includes:

- Report from the Chair and Managing Director (page 3)
- GRDC financials at a glance (page 5)
- Reports from the GRDC regions (page 7)
- Investment highlights (page 14)
- An overview of GRDC'S approach to commercialisation of technologies (page 24)
- The GRDC Team (page 26)
- The GRDC investment process timeline (page 28)

### 3. Projected 2009-10 Budget Analysis

#### Overview

The budget projections in this analysis are indicative only. Changes to GRDC's operating environment may require subsequent revisions to estimates in order to meet strategic objectives and comply with financial policy.

2009-10 is the third year of implementation of the GRDC's Strategic R&D Plan 2007-12. Investments in 2009-10 are aligned with the GRDC's corporate strategy, Lines of Business (LOB) strategies and regional and Australian Government priorities.

The 2009-10 revenue forecast is based on estimates of industry levies, the Australian Government contribution and ancillary sources of revenue (e.g. royalties, interest etc.). Actual 2009-10 revenue will be determined by seasonal conditions during the growing season, grain prices, the proportion of grain produced that is sold into pools rather than on the cash market and the payment terms of pools selected by growers. At this stage wheat production of 20.0mt and barley production of 6.8mt are estimated for the 2009-10 season.

Expenditure is governed by expected revenue and GRDC's ongoing commitments in order to maintain future research capacity. Grains production estimates and related prices for 2008-09 and 2009-10 are derived from data sourced from the Australian Bureau of Agricultural and Resource Economics (ABARE), Australian Crop Forecasters (ACF), Profarmer, and GRDC estimates.

Total revenue for 2009-10 is estimated at \$137.5 million. This is made up of \$75.5 million from the industry levy, \$52.9 million from the Australian Government, and \$9.1 million from ancillary revenue sources. The baseline case assumes 'status quo' levy rates. Total expenditure in 2009-10 is estimated at \$131.1 million with investment in research and development budgeted at \$118.4 million.

GRDC monitors estimates of grains production and prices on a regular basis and makes necessary adjustments to the underlying key variables in its revenue projection model. GRDC also consults regularly with the Levies Revenue Service in the Australian Government Department of Agriculture, Fisheries and Forestry and other agricultural consultants to validate levy projections.

GRDC aims to maintain a level of reserves between 40 percent and 70 percent of planned expenditure in the following financial year. The current baseline scenario discussed in Section 3 indicates reserves will be above the upper level. However the pessimistic scenario reflecting drought conditions shows the level of reserves falling to the target level in 2009-10.

## Revenue Forecast

Table 1 shows the GRDC's revenue and expenditure forecasts for 2008-09 and 2009-10, based on Attachment B – GRDC Revenue Forecast Assumptions. Projected revenue in 2009-10 is based on the levy rate of 0.99 percent of net farm gate value of all grains except for maize<sup>1</sup> and continuance of the prevailing Australian Government contribution. At this stage, GRDC's 2009-10 revenue is estimated at \$137.5 million. This estimate is highly dependent on the volume of grains production, grain prices, the proportion being sold into pools versus the cash market and the payment terms of pools selected by growers.

**Table 1: Indicative Revenue and Expenditure Forecast 2008-09 to 2009-10 (\$m)<sup>2</sup>**

	Forecast	
	2008-09	2009-10
Grain Grower Levy	73.8	75.5
Australian Government <sup>a</sup>	42.2	52.9
Interest, Royalty & Other <sup>b</sup>	16.6	9.1
<b>Total Income<sup>c</sup></b>	<b>132.6</b>	<b>137.5</b>
Ongoing Commitments	80.8	88.3
New Research Investment	26.8	30.1
Employees	6.4	6.6
Suppliers	5.6	6.1
<b>Total Expenditure</b>	<b>119.5</b>	<b>131.1</b>
Surplus/Deficit	13.1	6.3
Gross Reserves <sup>d</sup>	102.8	109.1

<sup>a</sup> 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 (3-year rolling average), provided the Government contribution does not exceed grower levies for the relevant year.

<sup>b</sup> "Other" includes penalties and project refunds.

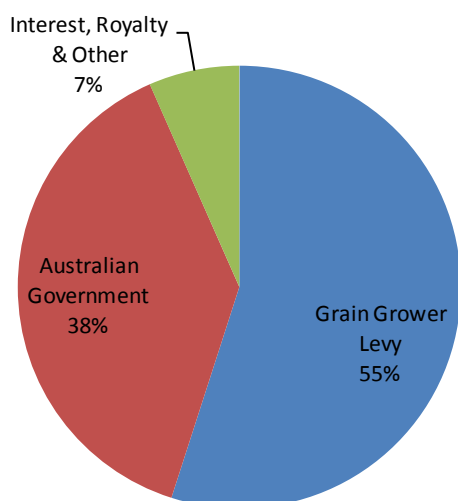
<sup>c</sup> Indicative revenue in 2009-10 is highly dependent upon the volume of grains production, prices and grain marketing arrangements.

<sup>d</sup> Gross reserves means total assets (including current and non-current assets) less total liabilities.

<sup>1</sup> Levy rate for maize is at 0.693 percent

<sup>2</sup> Figures are subject to rounding differences

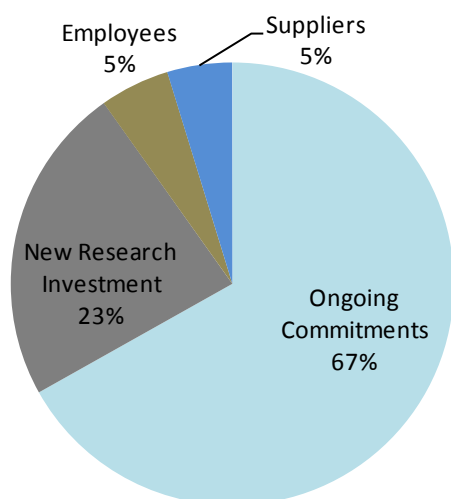
The proportional break-up of the GRDC's forecast revenue for 2009-10 is shown in Figure 1.



**Figure 1: Break-up of the GRDC's Forecast Revenue for 2009-10 as a Percentage of Total Revenue**

## Expenditure

Annual expenditure has been forecast at \$131.1 million for 2009-10. The percentage break-up of this into new investment, ongoing commitments, employees and suppliers is shown in Figure 2. It is estimated that \$30.1 million will be expended on new research investment; \$88.3 million on ongoing research commitments, and \$12.7 million for employee and supplier expenses.



**Figure 2: Break-up of the GRDC's Expenditure for 2009-10 as a Percentage of Total Expenditure**

### New Research Investment

GRDC's investments in 2009-10 are aligned with the Corporation's Strategic R&D Plan 2007-12. In developing investment priorities for 2009-10, the regional panels consulted extensively with growers and researchers through regional advisory committees, linkage groups and site visits. Drafting of the priorities presented in the Investment Plan 2009-10 began in early 2008

and took into account new investments, progress reports on existing investments, project reviews and other inputs. Program teams identified gaps and opportunities, which were incorporated into priority development for 2009-10.

New research investments in 2009-10 include:

- ***Novel approaches to control fungal diseases of oilseed Brassicas in Australia:*** this investment will build on previous research to develop novel disease control strategies for blackleg and sclerotinia stem rot. Expected outcomes are transgenic canola lines with improved disease resistance to fungal pathogens and development of novel fungicides which inhibit genes involved in crop disease.
- ***Cropping in Catchments:*** this involves several projects developing/modifying a range of communication and information activities delivered in partnership with regional bodies. The projects are based on the premise that the accumulation and integration of knowledge and management skills required by grain growers to implement sustainable farming systems are best achieved through a process of participation, action learning, and delivery of commercial outcomes. Individual projects within the investment will bring together researchers, leading agronomists, grower and NRM expertise to undertake participatory RD&E. Grain growers in each identified catchment will benefit through the accumulation and integration of knowledge and management skills for them to increase their economic, environmental and social sustainability.
- ***National Genetic Resource Centres:*** this investment ensures the continued supply of novel genetic variation to Australian plant breeders to support the development of new improved crop cultivars. New cultivars will help maximise returns to growers, minimise production constraints, improve sustainability, ensure international competitiveness and provide flow-on benefits to communities at large, particularly the rural sector.
- ***Technologies for the targeted exploitation of cereal and pulse landraces:*** this project will facilitate efficient and focused utilisation of germplasm from the global genetic resource collection for priority agronomic traits. This will allow such germplasm to be deployed in breeding and pre-breeding programs. The Focused Identification of Germplasm Strategy (FIGS) adopted in this project has the potential to optimise scientific investment and shorten lead times for the release of new cultivars for the benefit of individual farmers and various crop industries.

## Ongoing Commitments

While the GRDC's total expenditure budget for 2009-10 is estimated at \$131.1 million, 67 percent of this expenditure is required to maintain the GRDC's investment in its ongoing R&D activities (shown in Figure 2). Some of these ongoing commitments include:

- ***Effect of elevated carbon dioxide on wheat-based production systems under Australian field conditions:*** this project has designed and commissioned a national free air carbon dioxide enrichment (FACE) array consisting of a core facility at Horsham. This facility will generate detailed data sets on the field response of wheat to elevated carbon dioxide levels including interactions with water, nutrition and temperature. This data will then be made available to crop systems modellers for use in the calibration and extension of existing crop simulation models, to incorporate possible outcomes into future industry strategies.
- ***CropMate - climate information for crop management:*** this program will collate climate, weather, soils, crop and economic data associated with the decision points in a grain production system in a particular locality. The major output will be an interactive web-based decision support system designed to be used by growers and agronomists

across the grains industry, which will facilitate more informed decisions relating to crop production.

- **Low rainfall collaboration group:** this investment aims to foster greater sharing of knowledge and ideas between farming system groups across the low rainfall areas of south eastern Australia. The project will enhance communication activities, provide technical R&D support, advise on farm risk and economic management strategies, and evaluate project performance from economic, social and environmental perspectives.
- **Realising yield potential through farming systems RD&E:** this involves a number of individual projects focused on developing partnerships between growers, research organisations and agribusiness across targeted regions. The farming system groups across the country will be facilitated by this project investment in identifying the issues to be addressed to increase water use efficiency. This investment will also provide the projects with a focus on delivery of information and other extension activities that will support the increase in water use efficiency.
- **Management to minimise disease constraints in the Western Region:** this project continues the R&D delivery of previous investments and coordinates regional delivery of research on disease management of grain crops to sustain development of the grains industry. It will emphasise delivery of outcomes for Western Region farming systems, with potential for broader applicability. Pathology research support has contributed strongly to successes in WA grains production. The activities of this project are across commodities and cropping regions. This project enables complex disease management issues of the western grains industry to be addressed. Information gathered will then be delivered regionally to farmers to enhance their ability to make effective disease management decisions.
- **Australian Centre for Plant Functional Genomics Phase II:** the ACPFG aims to develop cereal cultivars with increased tolerance to environmental stresses such as temperature, water logging, drought, salinity and mineral deficiencies or toxicities. The ACPFG aims to provide innovative and environmentally attractive solutions to the problems faced by cereal growers by developing varieties that allow more sustainable farming while generating economic, social and environmental benefits.
- **Barley Breeding Australia (BBA):** this investment is a joint venture in the Australian national barley breeding program. BBA's primary objective is to provide Australian growers with agronomically superior and globally competitive varieties that meet the varied quality requirements of malt, feed and special purpose end-users.
- **Australian Cereal Rust Control Program:** the program's objectives are to monitor and produce information on cereal rust pathogens throughout Australia, identify and characterise new sources of rust resistance in cereals and to assist Australian cereal breeders to incorporate rust resistance into new cultivars.
- **Pulse Breeding Australia:** this investment is a joint venture to deliver superior pulse varieties to growers and build a world class breeding and germplasm enhancement program.
- **National Variety Trials:** the NVT program is an innovative approach to variety evaluation, generating independent and credible information for growers about newly released varieties. It is a national program and includes the most advanced lines from all plant breeding programs in trials across Australia.
- **Crop Biofactories Initiative:** the Crop Biofactories Initiative (CBI) aims to add value to agriculture and the chemicals industry through the development of technologies for novel industrial compounds from genetically modified non-food grain crops. Some of the expected outcomes from this investment include: crops that add market diversity to

domestic agricultural rotations; high-value oils and other products commanding premiums on the grains producing them; and post-harvest process opportunities allowing for greater value creation from crops.

- **A New Baking Process for Asia:** the aim of this investment is to develop a new baking process for Asian bakeries to better utilise Australian wheat varieties.

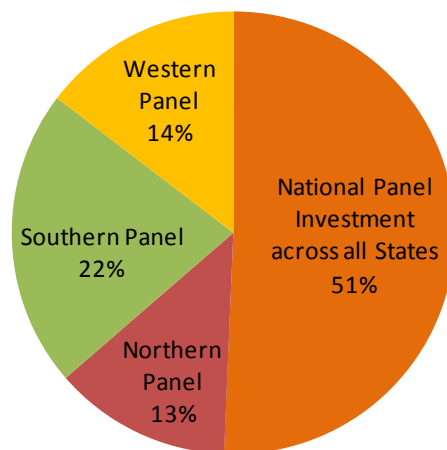
### Employee and Supplier Expenses<sup>3</sup>

Over the past five years, the GRDC's employee and supplier expenses have remained at levels enabling achievement of significant economies of scale. Employee and supplier expenses in 2009-10 have been projected to increase by 5 percent over the figure in 2008-09. However there is an overall decrease in employee and supplier expenses as a proportion of the GRDC's total expenditure for 2009-10.

### Expenditure by Panels and Lines of Business/Output Groups

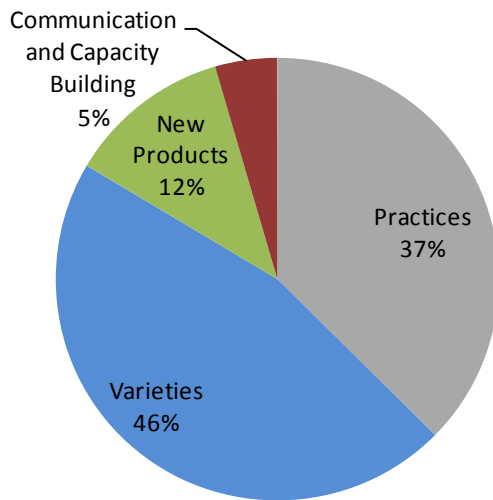
Figure 3 shows the percentage break-up of proposed 2009-10 R&D investment among the GRDC Panels. The National Panel investments comprise the national components of the GRDC's R&D investment across Australia. Figure 4 shows the percentage break-up of proposed 2009-10 R&D investment among the GRDC Lines of Business (LOB)/Output Groups.

**Figure 3: 2009-10 Proposed R&D Investment by Panels**



<sup>3</sup> 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  
GRDC Stakeholder Report 2009-10. 23/03/2009

**Figure 4: 2009-10 Proposed R&D Investment by Line of Business/Output Groups**



## Sensitivity Analysis

Sensitivity analysis was undertaken by changing key production variables in 2009-10 and the cash to pool market ratios in 2008-09. Gross reserves are above the upper target level for the baseline and are at the upper target level in Scenario 1 described below.

If future adjustments to forecast revenue result in unacceptably low reserves, then there are a number of options available to the GRDC Board other than curtailment of new investment. These include:

- o seek and access supplementary sources of revenue and/or leverage, and
- o withdraw from some existing commitments where the 'opportunity cost' of continuing becomes too high.

Table 2 shows the underlying assumptions and the results of the sensitivity analysis.

**Table 2: Sensitivity Analysis**

	Units	Baseline <sup>4</sup>		Scenario 1 <sup>4</sup>	
		2008-09	2009-10	2008-09	2009-10
Projected Revenue	\$m	132.6	137.5	135.1	121.5
Expenditure	\$m	119.5	131.1	119.5	131.1
Surplus/Deficit	\$m	13.1	6.3	15.5	-9.7
Gross Reserves <sup>5</sup>	\$m	102.8	109.1	105.2	95.5

### Variables Changed

	Units	Baseline	Scenario 1
Wheat Production in 2009-10	mt	20.0	10.7
Barley Production in 2009-10	mt	6.8	4.4
Sorghum Production in 2009-10	mt	2.0	0.9
Canola Production in 2009-10	mt	1.5	0.8
Oats Production in 2009-10	mt	1.2	0.9
Wheat Price (APW) in 2009-10	\$	315	378
Wheat Price (APH) in 2009-10	\$	347	416
Malt Barley Price in 2009-10	\$	229	275
Feed Barley Price in 2009-10	\$	189	227
Sorghum Price in 2009-10	\$	197	236
Canola Price in 2009-10	\$	570	684
Oats Price in 2009-10	\$	239	287
Cash vs Pool Ratio 2008-09 (Wheat)	%	45/55	65/35
Cash vs Pool Ratio 2008-09 (Barley)	%	62/38	70/30

<sup>4</sup> Figures are subject to rounding differences

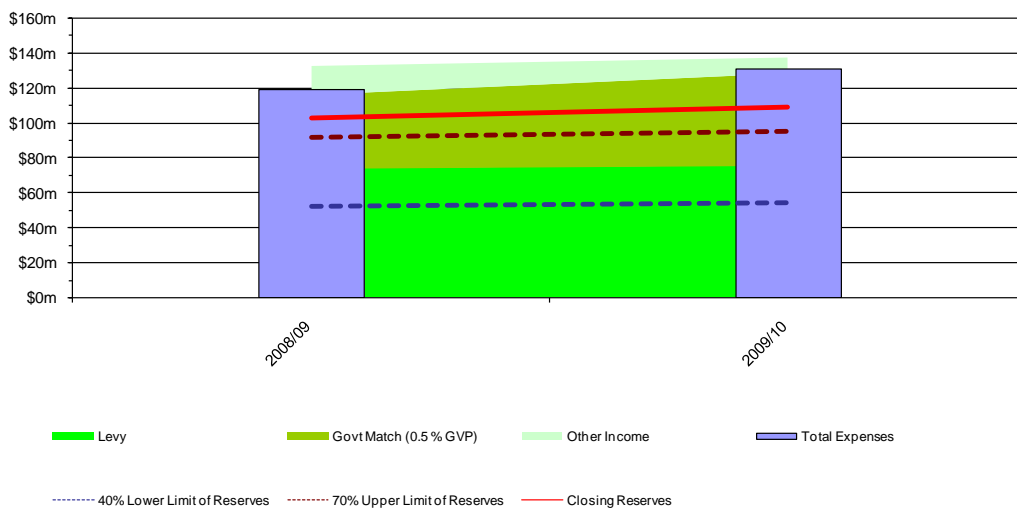
<sup>5</sup> Gross reserves is total assets (including current and non-current assets) less total liabilities  
GRDC Stakeholder Report 2009-10. 23/03/2009

## Baseline

The baseline budget 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 \$119.5 million in 2008-09 and \$131.1 million in 2009-10.

The baseline shows projected revenue of \$132.6 million in 2008-09 and \$137.5 million in 2009-10. Gross reserves increase to \$109.1 million in 2009-10 which is above the target level of the GRDC's reserves policy (see Figure 5).

**Figure 5: Baseline scenario**

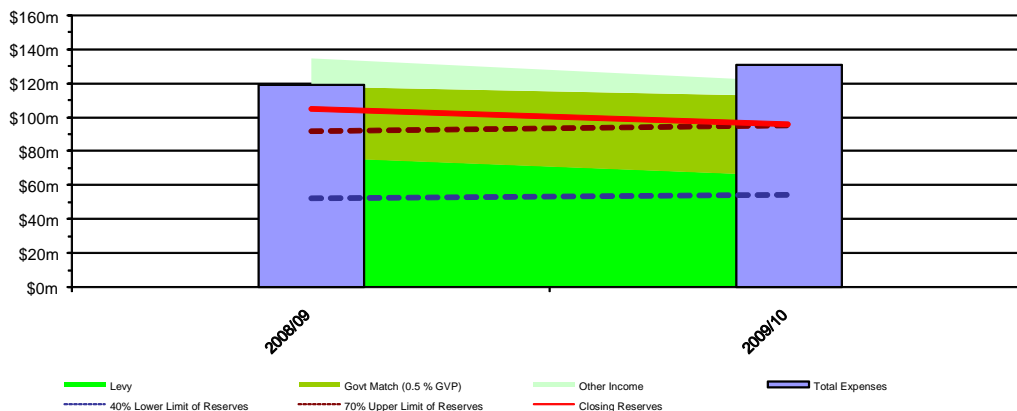


## Scenario 1

Scenario 1 assumes a pessimistic scenario for 2009-10 with a crop production reflecting averages from the previous 5 drought years. Prices for the major crops of wheat, barley, sorghum, canola, and oats are assumed to be 20 percent higher than baseline prices. It is also assumed that a higher proportion of the 2008-09 crop has been sold on the cash market and therefore will already have been received in 2008-09 (refer to Table 2)

This scenario shows projected revenue of \$135.1 million in 2008-09 and \$121.5 million in 2009-10. Gross reserves decrease to \$95.5 million which is at the upper target level of the GRDC reserves policy (see Figure 6).

**Figure 6: Scenario 1**



## **4. The Proposed Grains Levy Rate for 2009-10**

The GRDC's enabling legislation states that the levy is to be reviewed each year by 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. This stability has enabled the GRDC to deliver effective research and development capability to the grains industry by allowing sufficient reserves to be built up in years of high value production which have then been utilised in the leaner years when revenue was lower. From 2003-04 to 2006-07 the GRDC drew down on its reserves to deliver its investment program. The record prices in 2007-08 allowed the GRDC to replenish its reserves. However these prices have not been maintained in 2008-09.

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 2009-10.

**Attachment A - Growers' Report 2007-08**

# Attachment B - GRDC Revenue Forecast Assumptions

GRDC's baseline revenue forecast for 2008-09 and 2009-10 is based on the production and price estimates shown in Table B1.

**Table B1 GRDC's Price & Production Assumptions - 2008-09 and 2009-10**

<b>Production (mt)</b>	<b>2008-09</b>	<b>2009-10</b>
Wheat	21.0	20.0
Barley	6.7	6.8
Sorghum	2.0	1.9
Canola	1.5	1.4
Oats	1.2	1.3
<b>Prices (\$/t)</b>	<b>2008-09</b>	<b>2009-10</b>
Wheat-APW – Pool	331	315
Wheat-APW – Cash	290	315
Wheat-APH – Pool	369	347
Wheat-APH - Cash	316	347
Feed Barley – Pool	236	189
Feed Barley – Cash	192	189
Malting Barley – Pool	325	229
Malting Barley - Cash	278	229
Sorghum	202	197
Canola	541	570
Oats	200	239

**Sources:**

<b>Production (mt)</b>	<b>2008-09</b>	<b>2009-10</b>
Wheat	Australian Crop Forecasters March 2009 Report	10 year average derived from ABARE Commodities Report
Barley		
Sorghum		
Canola		
Oats		
<b>Prices (\$/t)</b>		
Wheat-APW –Pool	Profarmer 3 March 2009	ABARE Outlook March 2009
Wheat –APW-Cash	Average prices Australian Crop Forecasters and Profarmer – December 2008 to February 2009.	
Wheat-APH - Pool	AWB Media Release 27 February 2009	
Wheat-APH - Cash	Profarmer 3 March 2009	
Feed Barley - Pool	Average prices Profarmer 3 March 2009	
Feed Barley - Cash	Average prices Australian Crop Forecasters and Profarmer – December 2008 to February 2009.	
Malting Barley- Pool	Average prices Profarmer 3 March 2009	
Malting Barley- Cash	Average prices Australian Crop Forecasters and Profarmer – December 2008 to February 2009.	
Sorghum		
Canola		
Oats		