



Australian Government

**Cotton Research and
Development Corporation**



Annual Operating Plan 2009-2010

A.O.P.



CONTENTS



Australian Government

**Cotton Research and
Development Corporation**

Our purpose

Enhancing the performance of the Australian cotton industry through investing in research and development, and its application

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VISION

A globally competitive and responsible cotton industry.

MISSION

The quest for sustainable competitive advantage.

OUR OUTCOME

Adoption of innovation that leads to increased productivity, competitiveness and environmental sustainability through investment in research and development that benefits the Australian cotton industry and the wider community

ENABLING LEGISLATION

Cotton Research & Development Corporation (CRDC) is a statutory authority established in 1990 under the Primary Industries and Energy Research Development Act 1989 (PIERD Act), which outlines its accountability to the Australian Government and to the cotton industry.

As well as its responsibilities under the PIERD Act, CRDC has accountability and reporting obligations set out in the Commonwealth Authorities and Companies Act 1997, the Commonwealth Authorities and Companies (Report of Operations) Orders 2008 and annual Commonwealth Authorities and Companies Orders (Financial Statements).

RESPONSIBLE MINISTER

The Hon. Tony Burke, Minister for Agriculture, Fisheries and Forestry

COMMITMENT AND VALUES

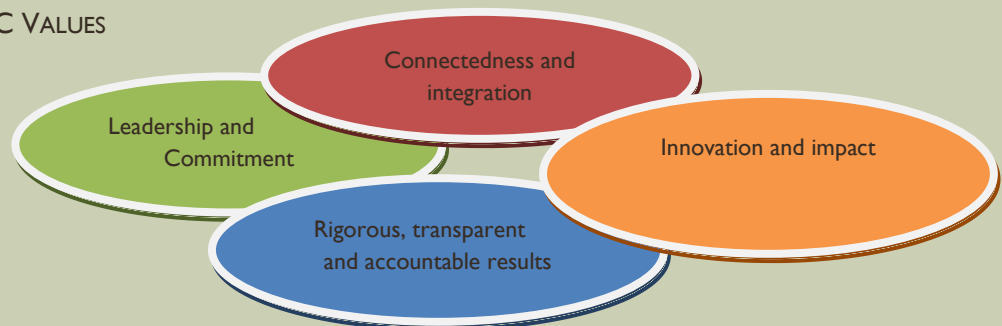
CRDC is committed to fulfill its legislated charter to invest in and manage an extensive portfolio of research, development and extension projects. The outcome of this is to enhance the ecological, social and economic values associated with cotton production systems and to benefit cotton industry participants, regional communities and the Australian community.



CRDC invests in and coordinates development of technical and non-technical documents, guides and other information tools and coordinates workshops, seminars and field days for a range of purposes, including research review and progression, information sharing or technology transfer to industry.

CRDC produces a range of publications about corporate activities and operations which disseminate research outcomes. It acts as a formal and informal information source for stakeholders and client groups and engages a broad range of media to communicate with its many audiences.

CRDC VALUES



CORPORATE PLANNING AND REPORTING TO STAKEHOLDERS

The PIERD Act outlines the accountability of CRDC to the Australian Government and to the Australian cotton industry through Cotton Australia. The CRDC is formally required to submit statutory plans and a report as summarised below. Beyond this formal level of interaction, the CRDC is committed to effectively engaging with and meeting the expectations of its stakeholders. In 2009-10, the CRDC plans an extensive program of interactions and communication involving forums, piloting of new interactions online and face to face with government, levy payers, communities, Rural RDCs and CRCs.

Strategic R&D Plan 2008-2013. This Plan covers a five-year period of investments in R&D and details CRDC's R&D goals, strategies and performance measures. It is developed through extensive consultation with stakeholders and is approved by the Minister prior to implementation.

Annual Operating Plan (AOP). This document informs key financial goals for the next fiscal year and details for potential research partners, investment priorities and measures of success. The purpose of this Plan is to specify the annual budget, the resources to be engaged and the research priorities that are to be addressed to give effect to the strategic R&D plan.

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FOREWORD: THE QUEST FOR SUSTAINABLE COMPETITIVE ADVANTAGE



This 2009-2010 Annual Operating Plan (AOP) is the second annual operating plan devised under the Cotton Research and Development Corporation (CRDC) 2008-2013 Strategic R&D Plan. The CRDC in collaboration with growers, the commercial sector and researchers is working to achieve 'the quest for sustainable competitive advantage' for Australian cotton.

This "quest" is both opportune and essential given the context of the significant current challenges and emerging issues confronting the Australian cotton industry and agriculture in general. These include:

- The ongoing and serious impact of drought;
- The increasing demand for land, water, food, energy and labour;
- Responding to climate change and natural resource management challenges;
- The effect of the global economic recession on the textile market; and
- The imperative for improved productivity.

Within this AOP, the CRDC details its planned strategic investments in R&D in the next year. The CRDC will continue to invest in fundamental and crucial farming systems R&D, as well as developing promising value chain research initiatives and complete scoping of key human capacity R&D needs and priorities commenced in 2008-09.

Working closely with all its research partners, the CRDC has sought to lessen the impact of reduced investment capacity on the research effort in recent years. The prudent use of reserves has also been central to sustaining core R&D capability. With cotton production forecast to increase again in the near term the CRDC will increase 2009-10 investment by 5% to \$10.2 million in research, development and its application. At the same time the CRDC will continue to monitor the outlook for production and its financial position very carefully.

Investment by industry and government in research and development is a key driver for the outstanding productivity growth applied year on year by a committed and a technically competent industry. The capacity of farmers to adapt and apply new information, tools and technologies has enabled farmers to better manage the impacts of highly variable and reduced rainfall. New levels of yield and fibre performance, inherent in Australian bred cotton varieties, provide a strong platform for productivity growth. Beyond this Australian farmers have responded to the challenging operating environment by adapting their farming systems to be increasingly flexible; water, fertiliser and energy efficient. Flexibility is the cornerstone in a complex system where cotton fits within a mix of summer and winter cropping options – both irrigated and dryland.

Many farmers are challenging the paradigm of irrigated cotton by supplementary irrigating crops planted on row spacings that normally would only have been considered for dryland planting. Soil management has moved on from reducing compaction and cultivation to improving “soil health” through crop rotation and building organic matter. There is no doubt that the widespread adoption of GM cotton technologies, together with a commitment to the stewardship of those technologies in the Australian environment, has helped cotton producers to adopt new farming systems and to adapt to climate change.

Beyond the farm gate, the industry is making progress in better understanding the unique qualities and competitive stature of Australian-produced fibre, while new research is spearheading opportunities to evaluate markets that may exist for premium fibre and oilseed products.

Finally the CRDC recognises the importance of the roles played by the Australian Government and the Australian cotton industry in supporting ‘the quest for sustainable competitive advantage’ for Australian cotton.

Last year saw the amalgamation of the Australian Cotton Growers Research Association (ACGRA) with Cotton Australia as the industry representative organisation to which CRDC is accountable. The CRDC is committed to ensuring that its stakeholder relationships continue to be positive and productive.

Bruce Finney, Executive Director

Mike Logan, Chair



A.O.P.

THE RURAL RESEARCH AND DEVELOPMENT MODEL



The Rural R&D Corporations (RDCs), including the CRDC, take a leading national role in planning, investing in and managing research and development for their respective industries.

RDCs are not research “grant” agencies. Their enabling legislation requires them to treat R&D as an investment in economic, environmental and social benefits to their industries and to the people of Australia.

Rather than focusing mainly on generating new knowledge for its own sake, RDCs strive to deliver high rates of return on research and development investment by influencing the full range of interactions along the innovation chain.

Striving for high returns on investment also leads RDCs to apply significant resources to translating research outputs into practical outcomes.

RDCs are required to conduct their activities in accordance with strategic research and development plans and annual operational plans that take account of the needs of end-users and other stakeholders. The plans are approved at ministerial level.

Although RDCs fund basic research, a high proportion of activity is applied to research and development – both short-term and long-term.

RDCs are fully accountable to their major stakeholders and to the wider community.

RDCs currently invest around \$540 million per year in R&D (including marketing) to improve the profitability and sustainability of rural industries and communities. A recent and extensive evaluation undertaken by the Rural RDCs of return on investment examined 36 highly successful projects together with 32 randomly selected projects completed between two and five years prior to 2006-07. The evaluation concluded that \$10.5 billion was generated from the 36 highly successful projects and that the RDC's portfolio returned \$11 for each dollar invested. The RDC's are continuing the evaluation work in 2009 and beyond.

COLLABORATION AND R&D

The CRDC is directly involved in joint research efforts with many research organisations, including Grains Research & Development Corporation, Land and Water Australia, Horticulture Australia, Rural Industries Research & Development Corporation and the Cotton Catchment Communities Cooperative Research Centre. The Corporation is a key partner and investor in the Cotton CRC which began its operations in October 2005. CRDC will co-invest \$4 million per annum during the life of the Cotton CRC.

It is important to recognise that collaboration is not an endpoint in itself. It does extend beyond co-investment and does come with transaction costs that need to be weighed up. Cooperation, coordination and communication are equally important.

In summary collaboration is a key means to minimise duplication of research effort, engage end users in the research process, make efficient and effective use of limited research resources, build critical mass, share risk, avoid restructuring costs and apply multidisciplinary perspectives. All of which drive greater value from investment in research. It is through collaboration that CRDC is involved in over 60% of total cotton industry R&D and addresses national cross sectoral strategic R&D priority issues.

In 2009-10, the scale of CRDC collaboration extends further than in the past.

The opportunity to optimise research investments and research resources with those of other industries has attracted the interest of public research providers, Grains R&D Corporation and others. Collaborative R&D investments are being geared to address climate change adaptation, where irrigated grain and cotton production are the basis of the farming system.

CRDC will seek innovative methods for extending the results of its extensive R&D investments to the growers on-farm and elsewhere in the industry. In part this will be done with other Rural RDCs as CRDC is planning to pilot projects which foster human capacity in farming system technologies.

Objects of the PIERD Act. 1989

- A/ Increase economic, environmental and social benefits
- B/ Achieve sustainable use and management of natural resources
- C/ Make more effective use of human resource and skills

National Research Priorities

- An environmentally sustainable Australia
- Promotion and maintenance of good health
- Frontier technologies for Building and Transforming Australian Industries
- Safeguarding Australia

Rural R&D Priorities

- Productivity and adding value
- Supply chain and markets
- Natural resource management
- Climate variability and climate change
- Biosecurity

Supporting Priorities

- Innovation Skills
- Technology

Australian Cotton Industry

Cotton Australia—the peak body of the Australian Cotton Industry

Invest in the skills, strengths and occupational health and safety of the human resources in the cotton industry and its communities

Improve the sustainability of the cotton industry and its catchments

Improve the profitability of the cotton industry

Create and support a strong, focused and committed research program

CRDC research, development and technology adoption investments

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INDUSTRY OUTLOOK, SUCCESS AND REPORTING



With the impact of drought still strongly evident, the scale of the 2008-09 Australian cotton crop was depressed for the 7th consecutive year with a planted area of 161,500 hectares. This compares with pre-drought industry production from 450,000 hectares. Nevertheless, the yields and quality of the cotton picked continued to demonstrate the capacity of producers to attain best-of-world yields in extensive irrigated production systems. In fact cotton crops picked between 2003 and 2008 recorded the five highest yields on record and demonstrate the impact of R&D investment in driving productivity growth.

With sustained demand for quality fibre on the world stage, and reduced competitiveness from grains, the potential for cotton production next season is forecast to improve subject to water availability. At the end of the 2009 cotton harvest, water storages are still at low levels in most catchments. Dryland plantings are likely to remain relatively constant at between 12% and 20% of the total planted area. ABARE's March 2009 forecast, allowing for normal seasonal conditions to prevail, is for a 2.2 million bale crop from 255,000 hectares. CRDC has budgeted on a 2.0m bale crop in the 2009-10 growing season.

ACHIEVING THE OUTCOMES

During 2009-10 CRDC will continually review performance and achievement against the strategic R&D Plan goals and measures of success and set directions for the coming year. At the same time, CRDC will monitor and consider the strategic importance of changes in the operating environment. In forming decisions, the

advice of industry and Australian Government stakeholders will remain of critical importance.

While the emphasis of CRDC investment is in applied research, the goal of transformational change requires that some higher risk investment in blue sky research is undertaken. Detailed business cases evaluating the risks, the pathway to adoption and the benefit to industry and Australia will be considered where this occurs. CRDC research programs will be implemented through a combination of open call and commissioned projects. Implementation will also involve investment through collaborative joint ventures or cross primary industry initiatives where CRDC identifies synergies and cost benefits. In implementing this Plan, CRDC shall seek to achieve a balance between shorter-term and longer-term strategic investments.

R&D INVESTMENT PROCESS

The CRDC has relied upon a two-part process to evaluate and make R&D investment decisions. This process continues to evolve as implementation of investment in value chain and human capacity research requires formation of new collaborations, attraction of new partners and research providers. Hence, commissioning of R&D investments is of increasing importance.

An online database system (Clarity) supports assessment and management of R&D investments. This system allows the CRDC to manage all existing and future investments with the highest levels of probity while providing for in-depth analysis of its investment portfolios against a wide range of economic and management criteria to the benefit of industry stakeholders.

The two-part process begins with calls for research applications for Preliminary Research Proposals (PRPs) nationwide using advertising in national newspapers, research publications and on the Corporation's website. This occurs in August-September each year, with September 1 being the deadline for the receipt of PRPs.

The second phase is where a PRP is judged to be in line with the Corporation's strategic priorities based on Government Research Priorities and industry policy. Applicants who can satisfy Stage 1 criteria are then invited to submit a full proposal by late January.

At an annual budget meeting in March, the CRDC Board makes final decisions regarding investments for nominated projects based on proposals for commissioned research and applications for new projects together with reports from continuing projects.

All projects are assessed and performance reviewed by the Corporation's industry stakeholder, Cotton Australia. Cotton Australia also assesses and offers its recommendations on commissioned research.

Beyond these processes where necessary, the CRDC may commission research to fill any identified gaps in the research program and where additional research projects may meet the needs of industry. The Board also sets aside an amount for contingencies, so that urgent research and development projects can proceed without undue delay.

MEASURES OF SUCCESS AND REPORTING

The CRDC strategic Plan 2008-13 and Annual Operating Plans are formulated to implement the corporation's objectives and outcomes using a triple bottom line framework for planning, implementation and reporting. They deliver one integrated outcome via three outputs:

- Economic - Profitability and international competitiveness
- Environmental - Sustainable production systems
- Social - Empowered people and communities

Under each program, CRDC has developed measures of success of achieving these broader triple bottom line outputs over the five year period 2008-2013 addressed by the CRDC Strategic R&D Plan. These are summarised in tables in this AOP

KEY RESEARCH PROVIDERS

Cotton Catchment Communities CRC (Cotton CRC)
 Australian and state government primary industry agencies (DPIs)
 CSIRO Divisions of Plant Industry, Entomology and Material Science and Engineering
 Universities
 Rural Research and Development Corporations (RDCs)
 Cooperative Research Centres (CRCs)
 Crop Consultants Australia (CCA)
 Agribusinesses
 Registered Training Organisations (RTOs)
 Consultants

THE AUSTRALIAN GOVERNMENT'S NATIONAL RESEARCH PRIORITIES

- An environmentally sustainable Australia
- Promoting and Maintaining Good Health through:
 - Promoting and maintaining good health
 - Frontier technologies for building and transforming Australian industries
 - Safeguarding Australia



THE AUSTRALIAN GOVERNMENT'S RURAL R&D PRIORITIES

PRODUCTIVITY AND ADDING VALUE

Improve the productivity and profitability of existing industries and support the development of viable new industries

CRDC has identified research, development and extension activities under its new Plan that will address the following three focus areas under this priority:

1. *Enable commodities and food to be produced more efficiently and sustainably*
2. *Provide information and tools to help producers identify the best returns on investment, especially in pursuing new product opportunities, and*
3. *Add value through improved products and processes that focus on consumer needs and expectations, such as healthier foods and capturing market advantage.*

SUPPLY CHAIN AND MARKETS

Better understand and respond to domestic and international market and consumer requirements and improve the flow of such information through the whole supply chain, including to consumers.

CRDC has identified research, development and extension activities under its new Plan that will address the following five focus areas under this priority:

1. *Identify changes in national and international market and consumer requirements (including social and environmental concerns) regarding the integrity and safety of food and other products*
2. *Provide appropriate stages of the supply chain with timely and accurate information on market demands and consumer requirements*
3. *Effectively service the information needs of consumers*
4. *Establish cost-effective traceability, quality assurance and certification systems improve packaging, storage and transportation, business analysis and supply chain logistics to ensure customers receive high quality products in the shortest possible timeframe*
5. *Support the development of products that enhance consumer health and well-being*

NATURAL RESOURCE MANAGEMENT

Support effective management of Australia's natural resources to ensure primary industries are both economically and environmentally sustainable.

CRDC has identified research, development and extension activities under its new Plan that will address the following four focus areas under this priority:

1. *Effectively manage weeds, pests and diseases, soil health and fish stocks to underpin primary production, environmental sustainability and social needs*
2. *Improve our understanding of water resources and their productive and efficient use for commercial, environmental and social needs*
3. *Support the conservation of native vegetation, biodiversity and ecosystems and the provision of ecosystem services within primary production systems, and*
4. *Mitigate the damage to the natural resource base caused by previous production practices, drought and extreme weather events.*



CLIMATE VARIABILITY AND CLIMATE CHANGE

Build resilience to climate variability, adapt to, and mitigate the effects of climate change.

CRDC has identified research, development and extension activities under its new Plan that will address the following four focus areas under this priority:

- *Increase our understanding of climate variability and climate change to improve our ability to predict changes and to manage impacts on primary industries and regional economies*
- *Develop and improve climate information tools, including forecasting models, to enable producers to make informed risk management decisions and build resilience to climate impacts*
- *Help manage and further reduce greenhouse gas emissions from primary industries, and*
- *Enable industries to respond and better adapt to climate change in a timely and sustainable manner and to capitalise on potential growth opportunities.*

BIOSECURITY

Protect Australia's community, primary industries and environment from biosecurity threats.

CRDC has identified research, development and extension activities under its new Plan that will address the following two focus areas under this priority:

- *Assist in minimising the risk of entry, establishment or spread of identified target invasive pests and diseases that could have major economic, social, health or environmental impacts*
- *Where practicable and cost-effective, assist to eradicate, contain, control or mitigate the impact of significant established invasive or endemic pests and diseases*

SUPPORTING RURAL RESEARCH AND DEVELOPMENT PRIORITIES

Frontier technologies for building and transforming Australian Industries.

Innovation Skills

Improve the skills to undertake research and apply its findings.

CRDC has identified a number of strategies and initiatives under its new Plan to address the following four areas aimed at improving innovation skills:

- *the constraints on availability and skills for research and innovation*
- *the skills needed by producers to make the best use of research and innovation*
- *the drivers and barriers to adoption of research and innovation by industries and in regional communities*
- *the impacts of research and innovation on industries and regional economies, including on the viability of businesses and communities.*

TECHNOLOGY

Promote the development and application of new and existing technologies.

CRDC has identified a number of strategies and initiatives under its new Plan to address the following three areas aimed at encouraging collaborative efforts to develop and apply new and existing technologies:

- *Critical points in the value chain that would benefit from a technological solution are identified*
- *International research and innovation are scanned so Australia can adopt and tailor technologies to our requirements*
- *Systems-approaches used to address challenges faced by industries*

Total Investment – Composition of Government Research Priorities attributed to each R&D Program

2009-2010 R&D Expenditure estimates across Rural Research Priorities

Rural R&D Priorities (RRDP)	Productivity and Adding Value (\$'000)	Supply Chain and Markets (\$'000)	Natural Resource Management (\$'000)	Climate Variability and Climate Change (\$'000)	Biosecurity (\$'000)	Supporting the Priorities		Other Research (\$'000)	Total (\$'000)
						Innovation Skills (\$'000)	Technology (\$'000)		
Program 1	602	363	0.0	9	0.0	0.0	257	0.0	1,231
Program 2	919	0.0	1,207	355	2,352	646	463	0.0	5,942
Program 3	212	18	129	11	118	894	27	0.0	1,409
Total Expenditure	1,733	381	1,336	375	2,470	1,540	747	0.0	8,582

Total Investment – Composition of Government Research Priorities attributed to each R&D Program

2009-10 R&D Expenditure estimates across NRP Goals*

National Research Priorities (NRP)	An Environmentally Sustainable Australia (\$'000)							Promoting and Maintaining Good Health (\$'000)				Frontier Technologies for Building and Transforming Australian Industries (\$'000)					Safeguarding Australia (\$'000)					Total (\$'000)
	A1	A2	A3	A4	A5	A6	A7	B1	B2	B3	B4	C1	C2	C3	C4	C5	D1	D2	D3	D4	D5	
Program 1							12			46	992		277									1,327
Program 2	484	150	508		150		380				980		496		12	69			2,515			5,744
Program 3	127		11				12				242				46	946			127			1,511
Total	611	150	519		150		404			46	2,214		773		58	1,015			2,642			8,582

STRATEGIC GOAL I


Add value to the Australian cotton industry with premium products in improved routes to market

Program of investment	2008-13 Strategic Objectives	2008-2013 Outputs & measures of success
I. VALUE CHAIN 	<ol style="list-style-type: none"> 1. Develop contemporary knowledge and intelligence about products, markets and supply 2. Develop improvements in current products 3. Facilitate the development of novel products 4. Advance cotton product processing 5. Development of objective measurement of Australian cotton fibre 	<p>Markets, risks and opportunities for Australian cotton products are clearly defined and understood within the industry.</p> <p>New partnerships between industry, researchers and end-users.</p> <p>Post farm-gate best management practices are developed and adopted.</p> <p>New and improved products, processes and measurements. Assessments of the competitive advantage of the Australian cotton industry</p>


2009-2010 Key priorities	2009-10 Key investments and outputs	2009-10 Indicators of success
<p>Improve market intelligence and customer feedback on Australian cotton's competitive advantage.</p> <p>Collaborative R&D partnerships with Australian cotton shippers and overseas cotton spinning mills to investigate opportunities for using newly developed Australian premium-quality cotton varieties, innovations in objective fibre measurement and textile processing knowledge.</p> <p>Facilitation of post-farm gate best-practices for classing, ginning, transport and storage</p>	<p>Premium Cotton Initiative</p> <p>Objective assessment of Australian Cotton</p> <p>Investigate new SFC measurement in Australian cotton</p> <p>The Relevance of Classing Grade on Textile Processing and Quality</p> <p>New markets for Australian cotton with novel spinning technology</p> <p>Agronomic management to optimise textile performance</p> <p>Expert paper: The future for Australian cotton in global textile markets</p> <p>Market potential for Modified Cotton Seed Oils</p> <p>Industrial testing & commercial development of sensors in cotton gins</p> <p>Classing, Ginning and Warehousing BMPs</p> <p>Technical support of SiroMat in the Australian market</p>	<p>Competitive potential for an Australian Premium Class of cotton defined through surveys of mills. Reports completed and contents communicated to industry</p> <p>Collaborations with mills established to objectively assess how Australian cotton is utilised in markets. Ongoing reporting and information provided to working groups and industry</p> <p>Opportunities for Australian cotton from new classing and spinning systems identified, reports generated and contents evaluated and communicated</p> <p>Market potential for Modified Cottonseed and Cottonseed Oils clarified, reports generated, contents evaluated and communicated</p> <p>Warehousing BMPs developed and participants engaged for adoption. Benefits communicated and results monitored and evaluated</p>

STRATEGIC GOAL 2

Cotton in a highly productive farming system with improved environmental performance

PROGRAM OF INVESTMENT	2008-13 Strategic Objectives	2008-2013 Outputs and measures of success
I: FARMING SYSTEMS 	<ol style="list-style-type: none"> 1. Build the industry's understanding of climate and natural resource challenges 2. Enhance the capacity of the industry to adopt resilient and adaptive farming systems 3. Protect industry from biosecurity threats 	<p>Climate and natural resource management risks and opportunities for Australian cotton producers are defined and understood.</p> <p>Climate and natural resource policy implications are interpreted.</p> <p>Collaborations and partnerships within and between rural industries delivering innovation, capacity and knowledge for farming systems.</p> <p>Benchmarking, assessing and reporting on productivity and environmental performance.</p>
2009-10 Key priorities	2009-10 Key investments and outputs	2009-10 Indicators of success
<p>Develop a new collaboration with Grains RDC addressing productivity and climate change preparedness in irrigated cotton & grains farming systems.</p> <p>Support ongoing R&D cross sectors partnerships addressing climate change, irrigation, soils and farm health & safety.</p> <p>R&D investments and activities to underpin the stewardship of biotechnologies and chemicals.</p> <p>Improved industry awareness and preparedness for major biosecurity threats</p>	<p>Measuring Greenhouse Gas emissions</p> <p>Dynamic deficits – matching irrigation to plant requirements in a variable climate</p> <p>Continued improving to cotton nutrition diagnosis and N use efficiency</p> <p>Defining critical soil nutrient concentrations in soils in irrigated cotton</p> <p>The Development of Sustainable Cotton Farming Systems for Coastal North Qld</p> <p>Continued improvement in management of emerging pests and IPM in Bollgard cotton</p> <p>Enhanced efficiency of Bt refuge crops within a changing cotton environment</p> <p>Continued studies monitoring and managing resistance to insecticides and Bt crops</p> <p>New understandings in ecology and sustainable management of soil borne fungal diseases</p> <p>Managing weeds and herbicides in a genetically-modified farming system</p>	<p>Enhanced capacity to measure greenhouse gas emissions</p> <p>New protocol for measuring N use efficiency tested on farms in five regions</p> <p>Collaborative farming systems research program established in coastal North Qld.</p> <p>New methods for improving refuge crop efficacy evaluated and communicated to industry and producers</p> <p>Increased industry participation in ongoing changes in pest resistance to insecticides and Bt cotton</p> <p>Evidence of adoption of innovative farming system practices</p> <p>Farming systems research gaps identified and future investment priorities detailed</p> <p>New collaborative farming systems R&D with Rural R&D Corporations</p>

STRATEGIC GOAL 3

A culture of innovation and learning		
PROGRAM OF INVESTMENT	2008-13 Strategic Objectives	2008-2013 Outputs and measures of success
3 HUMAN CAPACITY 	<ol style="list-style-type: none"> 1. Identify, understand and plan for future industry capacity needs 2. Improve human resource development and capacity 3. Enhance capacity to innovate 	<p>Industry and R&D capacity needs identified and gaps being addressed</p> <p>An industry with the capacity to deliver our future R&D innovation needs and their adoption</p> <p>The adoption of a shared vision for the cotton industry's future</p> <p>Assessments of industry capacity to innovate, lead and adapt</p>
2009-2010 Outputs and Measures of success	2009-10 Key investments and outputs	2009-10 Indicators of success
<p>Improve understanding of future industry human capacity and R&D capability needs</p> <p>Invest collaboratively in human capacity development for workforce, industry leadership, research and innovation skill outcomes.</p> <p>Extension of case studies to farmers demonstrating the impact of farming systems innovation on improved production efficiencies (water, fertiliser, energy) and environmental performance.</p> <p>Enhancement of the best management practices system to integrate planning, risk management and benchmarking with development of skills, knowledge and adoption of research outputs</p>	<p>Field to Fabric Training Course support and development</p> <p>Post-graduate engagements across investment programs</p> <p>Investment in science education</p> <p>Skills recognition and development</p> <p>Human Capacity Pilot Projects on farm</p> <p>Joint Rural R&D Capacity Partnerships</p> <p>Biosecurity Management Specialist (IPM & Biosecurity Extension, TIMS support)</p> <p>Innovation forums and Farming Systems Case Studies</p> <p>Specialised extension services</p> <p>On-line learning, knowledge aggregation and delivery initiatives</p> <p>New agribusiness engagements</p>	<p>Innovation forums delivering practice change</p> <p>Increased preparedness for biosecurity threats</p> <p>Adoption of the myBMP system</p> <p>Proof of concept in alternative R&D delivery methods and channels</p> <p>A culture for learning demonstrated</p> <p>Communities assisting practice change</p> <p>Aggregation of industry knowledge services & systems</p> <p>Agribusiness engagement in R&D products and services</p> <p>Shared industry vision for investment in human capacity</p>

CRDC FINANCIAL OUTLOOK



The Corporation is funded jointly by an industry levy of \$2.25 per bale (227 kilograms ex-gin) together with a matching contribution from the Australian Government.

This funding arrangement provides up to a maximum of 0.5 per cent of the gross value of production, or up to 50 per cent of expenditure, or not exceeding the contribution from grower levies.

As a result, the estimated 2008-09 cotton crop size of 1.4 million bales will significantly decrease bale levy receipts for both 2008-09 and 2009-10, while a

forecast crop size of 2.0 million bales for 2009-10 will continue to constrain both industry levy and Australian Government contributions.

The Government's general matching of industry contributions is expected to be limited to 0.5% of the cotton industry's three-year average Gross Value of Production (GVP). Royalties from the sale of domestic and international planting seed and interest on investments provide further significant revenue streams, however royalty income is directly dependent upon the area planted.

FORECAST EXPENDITURE BY PROGRAM	(\$,000s)
Premium products in improved routes to market	1,143
Productive farming system with improved environmental performance	4,965
A culture of innovation and learning	1,308
	7,416
Cotton CRC untied cash	100
Contingency and Corporate R&D Activities	1,066
	8,582

FORECAST EXPENDITURE BY TYPE	
R&D payments	7,881
R&D corporate	701
Employees	1,280
Management and administration	382
	10,244

FORECAST REVENUE BY SOURCE	
Commonwealth contributions	2,789
Industry levies	3,780
Interest	240
Royalties	2,375
Other	30
	9,214



TABLES OF FINANCIAL PERFORMANCE AND ESTIMATES

CAC ACT AUTHORITY—GCS NFP
 COMPREHENSIVE INCOME STATEMENT SHOWING NET COST OF SERVICES
 FOR THE PERIOD ENDED 30 JUNE

	Estimated actual 2008-09 \$'000	Budget estimate 2009-10 \$'000	Forward estimate 2010-11 \$'000	Forward estimate 2011-12 \$'000	Forward estimate 2012-13 \$'000
EXPENSES					
Employee benefits	1,218	1,280	1,331	1,384	1,440
Supplier	343	322	331	340	349
Grants	8,093	8,582	8,740	8,792	8,298
Depreciation and amortisation	62	60	52	48	48
Total expenses	9,716	10,244	10,454	10,564	10,135
LESS OWN SOURCE INCOME					
Revenue					
Sale of goods and rendering of services					
Fees and fines					
Interest	780	240	400	400	400
Rents	15	15	15	15	15
Royalties	1,616	2,375	2,000	1,625	1,250
Other revenue	342	15	15	15	15
Total Revenue	2,753	2,645	2,430	2,055	1,680
Gains					
Sale of assets					
Other gains					
Total gains					
Total own-source income					
Net cost of (contribution by services)	6,963	7,599	8,024	8,059	8,455
Revenue from Government	2,241	2,789	3,658	4,000	4,000
Industry levies	2,198	3,780	4,455	4,455	4,455
Surplus (deficit)	(2,524)	(1,030)	89	(54)	-
Surplus (deficit) attributable to the Australian Government	(2,524)	(1,030)	89	(54)	-
OTHER COMPREHENSIVE INCOME					
Changes in Asset revaluation reserves					
Total other comprehensive income					
Total comprehensive income					
Total comprehensive income attributable to the Australian Government					

BUDGETED DEPARTMENTAL BALANCE SHEET AS AT 30 JUNE					
	Estimated actual 2008-09 \$'000	Budget estimate 2009-10 \$'000	Forward estimate 2010-11 \$'000	Forward estimate 2011-12 \$'000	Forward estimate 2012-13 \$'000
ASSETS					
FINANCIAL ASSETS					
Cash and cash equivalents	8,963	7,879	7,683	7,589	7,550
Trade and other receivables	1,122	1,298	1,525	1,598	1,670
Total financial assets	10,085	9,087	9,208	9,187	9,220
NON FINANCIAL ASSETS					
Land and buildings	479	470	461	452	443
Infrastructure, plant and equipment	79	60	61	71	81
Intangibles	56	62	48	24	0
Non-financial assets - other	23	23	23	23	23
Total non-financial assets	637	615	593	570	547
Assets held for sale					
Total assets	10,722	9,702	9,801	9,757	9,767
LIABILITIES					
Interest bearing liabilities					
Other					
Total interest bearing liabilities					
PROVISIONS					
Employees	225	235	245	255	265
Total provisions	225	235	245	255	265
Payables					
Suppliers	30	30	30	30	30
Grants	1,040	1,040	1,040	1,040	1,040
Total payables	1,070	1,070	1,070	1,070	1,070
Total liabilities	1,295	1,305	1,315	1,325	1,325
Net assets	9,427	8,397	8,486	8,432	8,432
EQUITY					
Parent entity interest					
Reserves	135	135	135	135	135
Retained surpluses or accumulated deficits	9,292	8,262	8,351	8,297	8,297
Total parent entity interest	9,427	8,397	8,486	8,432	8,432
Minority interest					
Total minority interest					
Total equity					
Current assets	10,085	9,087	9,208	9,187	9,220
Non-current assets	637	615	593	570	547
Current liabilities	1,295	1,305	1,315	1,325	1,335
Non-current liabilities	0	0	0	0	0

BUDGETED DEPARTMENTAL STATEMENT OF CASH FLOWS AS AT 30 JUNE

	Estimated actual 2008-09 \$'000	Budget estimate 2009-10 \$'000	Forward estimate 2010-11 \$'000	Forward estimate 2011-12 \$'000	Forward estimate 2012-13 \$'000
OPERATING ACTIVITIES					
Cash received					
Goods and services	15	15	15	15	15
Interest	706	570	380	400	400
Other	6,074	8,581	9,921	10,022	9,648
Total cash received	6,795	9,166	10,316	10,437	10,063
CASH USED					
Employees	1,199	1,259	1,311	1,364	1,420
Suppliers	342	325	341	354	363
Grants	8,442	8,718	8,740	8,788	8,294
Total cash used	9,983	10,302	10,392	10,506	10,077
Net cash from or (used by) operating activities	(3,188)	(1,136)	(76)	(69)	(14)
CASH RECEIVED					
Other					
Total cash received	0	0	0	0	0
Cash used					
Purchase of property, plant and equipment	0	38	30	25	25
Total cash used	0	(38)	(30)	(25)	(25)
Net cash from or (used by) investing activities	0	(38)	(30)	(25)	(25)
FINANCING ACTIVITIES					
Cash received	30	30	30	30	30
Other					
Total cash received	30	30	30	30	30
Cash used					
Other					
Total cash used	0	0	0	0	0
Net cash from or (used by) financing activities	30	30	30	30	30
Net increase or (decrease) in cash held	(3,188)	(1,174)	(106)	(94)	(39)
Cash at beginning of the reporting period	12,151	8,963	7,789	7,683	7,589
Cash at the end of the reporting period	8,963	7,789	7,683	7,589	7,550



A.O.P.

**DEPARTMENTAL STATEMENT OF CHANGES IN EQUITY
SUMMARY OF MOVEMENT (BUDGET YEAR 2009-2010)**

	Retained earnings	Asset revaluation reserve	Other reserves	Contributed equity / capital	Total equity
	\$'000	\$'000	\$'000	\$'000	\$'000
Opening balance as at 1 July 2009					
Balance carried forward from previous period	9,292	135			9,427
Adjusted opening balance	9,292	135			9,427
Income and expense					
Sub-total income and expense					
Surplus (deficit) for the period	(1,030)				(1,030)
Total income and expenses recognised directly in equity	(1,030)				(1,030)
Transactions with owners					
Sub-total transactions with owners					
Estimated closing balance	8,262	135			8,397

STATEMENT OF DEPARTMENTAL ASSET MOVEMENTS (2009-10)

Asset category (as appropriate)

As at 1 July 2009					
Gross book value	130	377	182	117	806
Accumulated depreciation /		(28)	(103)	(61)	(192)
Opening net book balance	130	349	79	56	614
CAPITAL ASSET ADDITIONS					
Estimated expenditure on new or replacement assets					
by purchase or internally developed			12	26	38
Sub-total	0	0	12	26	38
OTHER MOVEMENTS					
Depreciation / amortisation expense		(9)	(31)	(20)	(60)
As at 30 June 2010					
Gross book value accumulated	130	377	194	143	844
Accumulated depreciation / amortisa-	0	(37)	(134)	(81)	(252)
Closing net book balance	130	340	60	62	592



Australian Government

Cotton Research and Development Corporation

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Non-executive Directors	Glen Fleischfresser
	Lisa Wilson
	Kerry Adby
	Mary Corbett
	Peter Hayes
	Juanita Hamparsum

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General Manager Business & Finance	David Coleman
Manager Communication & Capacity Investment	Rohan Boehm
Manager Farming Systems Investment	Tracey Farrell
Manager Value Chain Investment	Dallas Gibb
Manager R&D Implementation	Helen Dugdale
Project Administration Manager	Lee-Anne Melbourne
Executive Assistant	Dianne Purcell
Administrative Assistants	Margaret Wheeler
	Karen Larsen



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