Sugar Research Australia™

Annual Report 2015–16

Our vision

Delivering valued solutions for a growing Australian sugar industry

Our purpose

Undertaking targeted research, development and adoption programs for the sugar industry

Our values

Innovation

Investor satisfaction

Accountability

Teamwork

Sugar Research Australia Limited

Head Office:

50 Meiers Road, Indooroopilly QLD 4068, Australia

Mailing Address:

PO Box 86, Indooroopilly QLD 4068, Australia

Phone: 07 3331 3333

Fax: 07 3871 0383

Email: sra@sugarresearch.com.au

Web: www.sugarresearch.com.au

Front cover image

SRA Executive Manager for Strategic Initiatives, Dr Frikkie Botha, examines Yellow Canopy Syndrome expression at an SRA trial site in the Burdekin with SRA Researcher Mr Dave Olsen.

ISSN: 2203-7705 (Print)

© **Copyright 2016 by Sugar Research Australia Ltd.** All rights reserved. No part of the *Annual Report 2015–16* (this publication) may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of Sugar Research Australia Ltd.

Disclaimer: In this disclaimer a reference to 'SRA', 'we', 'us' or 'our' means Sugar Research Australia Ltd and our directors, officers, agents and employees. Although we do our very best to present information that is correct and accurate, we make no warranties, guarantees or representations about the suitability, reliability, currency or accuracy of the information we present in this publication, for any purposes. Subject to any terms implied by law and which cannot be excluded, we accept no responsibility for any loss, damage, cost or expense incurred by you as a result of the use of, or reliance on, any materials and information appearing in this publication. You, the user, accept sole responsibility and risk associated with the use and results of the information appearing in this publication, and you agree that we will not be liable for any loss or damage whatsoever (including through negligence) arising out of, or in connection with the use of this publication. We recommend that you contact our staff before acting on any information provided in this publication.

Warning: Our tests, inspections and recommendations should not be relied on without further, independent inquiries. They may not be accurate, complete or applicable for your particular needs for many reasons, including (for example) SRA being unaware of other matters relevant to individual crops, the analysis of unrepresentative samples or the influence of environmental, managerial or other factors on production.

Table of contents

04 *About SRA*

05 *Top achievements*

06 *Message from the Chairman*

08 *Message from the Chief Executive Officer*

10 *Driving the Australian sugar industry RD&E agenda*

12 *Investment overview*

14 *Research highlights*

20 *Response to Impact Areas*

24 *People*

25 *Research collaborations*

27 *Members and Delegates*

28 *Company structure*

29 *Corporate governance framework*

30 *Corporate governance*

34 *Directors' Report for the year ended 30 June 2016*

41 *Financial statements*

59 *Directors' declaration*

60 *Lead Auditor's Independence Declaration under Section 307C of the Corporations Act 2001*

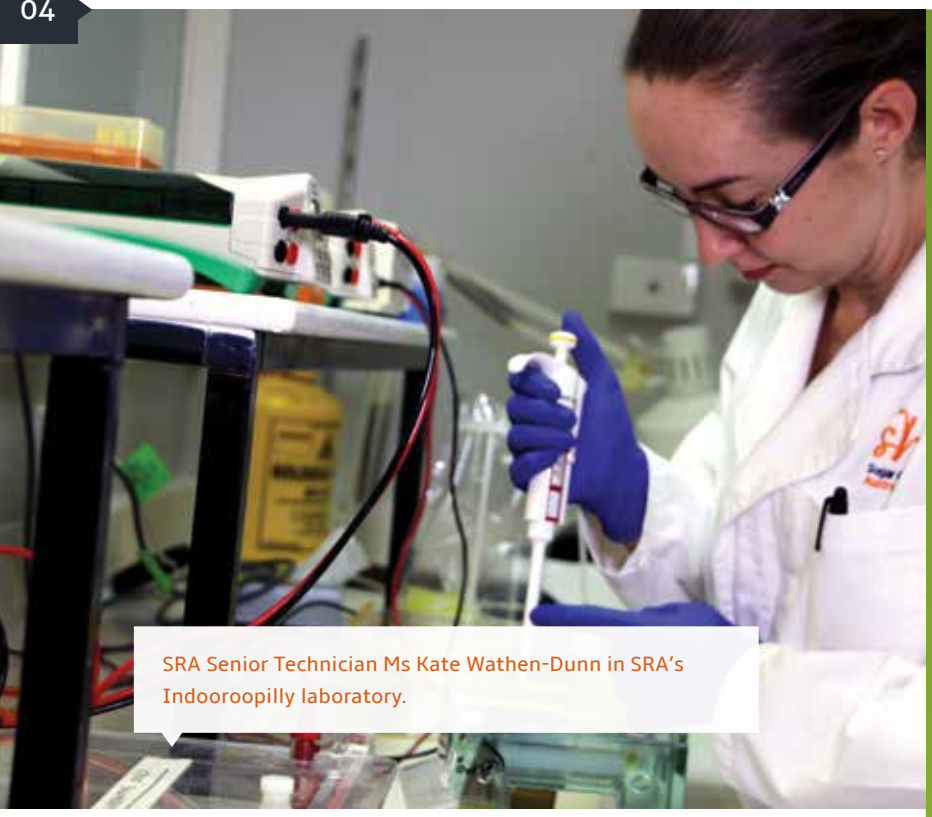
61 *Independent Auditor's Report to the Members of Sugar Research Australia Limited*

63 *Appendix A: Annual reporting compliance checklist*

65 *Appendix B: List of Delegates per mill area/group*

66 *Appendix C: 2013/14-2017/18 Strategic Plan Summary*

68 *Alignment of SRA's KFAs to Industry and Government Priorities*



SRA Senior Technician Ms Kate Wathen-Dunn in SRA's Indooroopilly laboratory.

About SRA

Sugar Research Australia (SRA) is an Industry Owned Company (IOC) that invests in and manages a portfolio of projects that drive productivity, profitability and sustainability for the Australian sugarcane industry.

As the declared Industry Services Body for the Australian sugarcane industry under the *Sugar Research and Development Services Act 2013* (Cth), SRA is responsible for the direct provision of research, development and adoption activities as well as the ongoing management and investment of funds received from industry levy payers and government, for the benefit of the sugarcane industry and for the wider public good.

Core responsibilities

The core responsibilities of SRA are to:

- Deliver cost-effective research and development services to the Australian sugar industry to enhance its viability, competitiveness and sustainability;
- Carry-out, coordinate and provide funding for R&D activities in relation to the Australian sugar industry;
- Facilitate the dissemination, extension, adoption and commercialisation of results of R&D activities; and
- Support and develop industry research capacity.

SRA operates research farms, laboratories, and offices across the Australian sugarcane industry. The SRA research effort extends across the industry and occurs for all growers and millers. SRA has approximately 150 staff that operate across the business in a range of roles that support and drive research, development, and adoption for the Australian sugarcane industry.

SRA locations

- Broadwater
- Condong
- Indooroopilly
- Woodford
- Bundaberg
- Mackay
- Brandon
- Ingham
- Tully
- Meringa

SRA has developed a targeted approach to our operational objectives to ensure that the services we deliver to the industry can be measured and are of value.

Alongside these objectives, SRA has developed a performance monitoring and evaluation program to measure and demonstrate our performance against key performance indicators in our Strategic Plan and Annual Operational Plan.

Top achievements

SRA's standout achievements over the last 12 months

1

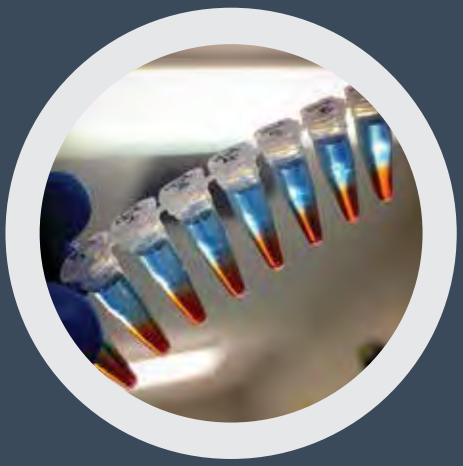
Five new varieties (named SRA4(1), SRA5, SRA6, SRA7 and SRA8) were approved for release in 2016.

2

SRA secured significant funding under the Commonwealth Rural R&D for Profit program to allow for a strategic and holistic investment into the key Impact Area of improving harvest efficiency. This will mean a minimum investment of approximately $5.5M over the following three years to address the problem.

3

In November, 2015, eight international experts conducted an independent review of the entire Yellow Canopy Syndrome integrated program of research. The research program was reviewed favourably by the expert panel, and all of their recommendations have been, or will be, enacted.



4

A pre-commercialisation study to evaluate a new diagnostic for Ratoon Stunting Disease (RSD) was started in conjunction with support of productivity services organisations. The new assay will significantly reduce costs to productivity services and SRA by a quicker and simpler sampling method. The savings could be in the order of $40/field sampled and annually Productivity Service Organisations sample 4000 to 5000 fields, which would mean a saving of up to $200,000/year.

5

New variety agreements were signed with Thailand (Mitr Phol), USA (USDA Canal Point and Houma), and Vietnam (Sugarcane Research Institute).

SRA Board members at SRA's Indooroopilly head office: Mr Steve Guazzo, Mr Ian Sampson, Dr Guy Roth, Dr Ron Swindells, Mr Mike Gilmour, Dr Ian Johnsson, and Dr Helen Garnett.

Message from the Chairman

Sugar Research Australia (SRA) has completed its third year of operation. Much of our work stands on the shoulders of our antecedent companies and SRA is committed to building on their long histories of sugarcane research, development and extension. We will strive to create value that will continue to gain momentum into the future. ***Dr Ron Swindells, Chairman, SRA***

This is my first Chairman's report for SRA and I would like to use this opportunity to outline SRA's strategic approach to research investment. At the establishment of SRA, SRA developed eight Key Focus Areas (KFAs) in consultation with industry to drive our research agenda and our performance against these KFAs is outlined in this annual report.

In addition to our KFAs, through consultation with a range of investors, the Board identified four Impact Areas that require priority research investment and results for sugarcane growers and millers. These are: conventional and genetically modified plant breeding; solving Yellow Canopy Syndrome (YCS); harvesting efficiency; and improving adoption. This annual report sets out in detail SRA's achievements and activities in relation to these Key Focus areas and four Impact Areas.

One of the Board's considerations in formatting a portfolio of projects that have practical applications on-farm and at the mill is that these projects need to have scalability when it comes to adoption.

SRA will primarily invest in research projects that will, if successful, have broad adoption and widespread industry benefit.

However, while some research projects and outcomes are very scalable, for example varieties from the breeding program, other projects have elements that are less scalable, for example the cost barriers associated with investing in precision agriculture.

Nevertheless, all farms and mills are important to us, and SRA is continuing to target activities that benefit both large and small businesses.

The length of the plant breeding cycle, where production of a new variety can take 12 to 14 years, is receiving increased focus. Molecular markers are one tool being used to identify much earlier in the selection system whether lines have the characteristics that are needed in commercial varieties – we could then discard deficient lines, making our program more efficient.

As well, tissue culture, and research into the exciting possibility of synthetic seed, have, and hopefully will, lead to accelerating the propagation of new varieties.

Countering this is the industry's desire for more information on ratooning before the release of a new variety, although marker technology is also expected to have beneficial impacts in this area, once the underlying plant characteristics that influence ratoonability have been

Growers, millers and advisors at the annual joint SRA and Mackay Area Productivity Services field day in May 2016.

Dr Ron Swindells, Chairman, SRA.

determined and genetic markers for these particular characteristics identified.

SRA inherited significant assets from BSES, but in the last period of BSES ownership, with significant budgetary constraints, there were minimal investments in infrastructure and maintenance – out of necessity.

Many of SRA's physical assets are in need of investment and a comprehensive asset management plan has been developed to address this situation. The process has started with a major upgrade at Meringa now complete, and the Bundaberg and Brisbane sites are the next major sites in line for necessary investment.

As well, the software backbone of the plant breeding program, SPIDNet, has been identified as requiring upgrading. Work has commenced on this major multi-year project that is of critical importance to SRA for the Australian sugarcane industry.

The Board held three meetings in regional centres throughout the year and Directors took the opportunity to meet with various stakeholders during these visits.

Among the many issues raised at these meetings is the perceived lack of visibility of SRA as a regional presence.

In the main, this is a consequence of the model developed by the industry for SRA whereby SRA would be a new research organisation different in purpose and structure to BSES.

SRA's role is to package technology and innovative practices for access by all of our investors and third party advisers such as productivity services and farming advisory companies, and facilitate the adoption of the new technologies and practices through the activities of these regionally-based service providers.

We are in the process of reviewing our consultative procedures and adoption strategy and will be consulting with a range of stakeholders to attempt to put in place mechanisms that best benefit the industry.

The SRA Board ensures that the contestable funding process is operated fairly and in accordance with our constitution.

As part of an internal audit work-plan, an audit was conducted in 2015 to review the research funding process and controls.

The review by Price Waterhouse Coopers found: *"The RFP and RFU have implemented sound processes and controls to support research project assessment and selection. A strong control environment does exist and processes supporting ongoing project monitoring and management of milestone payments by the RFU are well structured and were consistently applied across a sample of projects."*

SRA's work is possible because of the collaboration and dedication of many individuals and organisations. Foremost thanks goes to SRA's investors, who consist primarily of growers and millers through the statutory levy, and also the Commonwealth and Queensland Governments.

I particularly acknowledge:

- CANEGROWERS Australia, the Australian Sugar Milling Council (ASMC), the Australian Sugar Industry Alliance (ASA), the Australian Cane Farmers Association, the Commonwealth Department of Agriculture and Water Resources, the Queensland Department of Agriculture and Fisheries and the Queensland Department of Environment and Heritage Protection, as well as all of the industry bodies and research and extension providers with whom we collaborate.
- My fellow Directors on the SRA Board and the members of the Research Funding Panel (RFP), who provide vital guidance and leadership.
- SRA Delegates and Research Advisory Committees, all of whom provide important guidance and information.
- The SRA staff, who are spread across multiple sites and divisions. No matter where they work or what their job is, they collectively show enthusiasm for the job and take great pride in their work.
- SRA's CEO, Mr Neil Fisher, for providing strategic leadership to SRA.

SRA is the research arm of the Australian sugar industry. We are determined to be a valued partner in the future success of this industry.

SRA Delegates in the Central Region Mr Michael Deguara, Mr Bill McDonald, Mr Malcolm Langdon, and Mr Tony Large hear from SRA Leader for Crossing and Selection Dr George Piperidis about the SRA breeding program at SRA's Mackay research station.

Message from the Chief Executive Officer

Technology and the preparedness to innovate are at the heart of ensuring all businesses can remain productive and profitable in a continually challenging environment. ***Mr Neil Fisher, CEO, SRA***

This is particularly the case within the Australian sugarcane industry, as we continue to face external threats that threaten profitability and productivity.

In that context, Sugar Research Australia (SRA) plays a crucial role in driving innovation through your investment in research, development and adoption, and providing outcomes that make a positive contribution to improving growers' and millers' profitability and productivity.

That is why the SRA Board has focused its investment upon four priority Impact Areas of conventional and genetically modified plant breeding; solving Yellow Canopy Syndrome (YCS), harvesting efficiency, and improving adoption.

These are strategic research areas that have been identified as requiring additional attention and can add significant value or are impacting strongly on our investors, thus requiring successful research solutions.

Plant breeding continues to be the single-biggest investment area for SRA, and at the core of all our efforts is a clear objective: delivering the best possible varieties for each region and putting more cane over the rollers.

Our varieties have been developed to maximise profitability for sugarcane growers and millers, striking the right balance between tonnes of cane, sugar content, and optimum resistance to diseases. In addition, we are always looking for avenues for improvement.

Our industry now has strong ownership of the breeding program. Led by industry, we have adopted a new economic weighting for traits, developed by the industry, and the final approval of all new varieties will be a decision that rests in the hands of the local region.

YCS remains a frustrating mystery, but our researchers have made a number of steps forward over the last year. They have defined a number of key learnings, as well as reviewed a number of possible causes that have been communicated to industry, and we are moving closer to a diagnostic tool for YCS.

We also invited an Expert Panel of international and Australian external scientists to review the YCS research program, and the recommendations that resulted from that review are being enacted.

We are also taking a holistic approach to harvest efficiency, coordinating workshops and research activities in a strategic way to ensure that growers, millers and operators are able to cooperate to optimise harvest efficiency. SRA's success in securing funding via round two of the Rural R&D for Profit program for a major harvest efficiency project will help deliver positive outcomes for our industry.

Our work on adoption continues to improve as we continue to collaborate with a range of providers to see the best outcome for the adoption of research.

These four Impact Areas are also underpinned by the research investment agenda based on the eight Key Focus Areas (KFAs) within the Strategic Plan. You can read more about our achievements in that context within this annual report.

SRA continues a strong focus on collaboration to achieve research outcomes for our investors. We are also in close contact with growers, millers, and industry, who continue to provide valuable feedback into our activities.

A strong component of that is the work of the SRA Delegates, who represent each mill area and help convey information between members and SRA.

Importantly, we continue to explore ways of leveraging the investment of growers and millers further through new external funding collaboration opportunities from outside the industry.

In 2015/16 this included significant external funding for SRA through programs including Rural R&D for Profit, Australia-India Strategic Research Fund, Australian Research Council, Australian Centre for International Agricultural Research, the Queensland Department of Environment and Heritage Protection, and private sector companies such as chemical companies. In 2015/2016, our collaborative research income was approximately $4.8 million.

I thank all of the groups who collaborate with and assist SRA, including CANEGROWERS Australia, the Australian Sugar Milling Council (ASMC), Australian Cane Farmers Association, the Australian Sugar Industry Alliance (ASA), productivity services organisations, and all research collaborators.

We also continue to collaborate with our larger investors and stakeholders and the Federal and State governments.

Neil Fisher, Chief Executive Officer.

Thank you to the Commonwealth Department of Agriculture and Water Resources and the Queensland Department of Agriculture and Fisheries (DAF) for their continued investments into SRA.

SRA as a company is always looking to improve our outcomes. To assist that, we have developed our cultural values of investor satisfaction, team work, innovation, and accountability, which have been embraced by SRA staff.

Thank you to the SRA staff for their commitment to the task at hand. Thank you to the SRA Board and the Research Funding Panel for their strategic leadership and guidance.

Most of all, I thank the grower and miller investors in SRA. Our work is all geared toward helping them improve their productivity and profitability through targeted research, development and adoption activities.

Driving the Australian sugar industry RD&E agenda

SRA's 2013/14–2017/18 Strategic Plan guides our research, development and adoption program and sets the medium- to long-term outcomes SRA intends to deliver for the Australian sugarcane industry.

The Strategic Plan was developed in close collaboration with industry to ensure SRA's objectives and planned outcomes addressed the needs and priorities of the sugar industry. In addition, SRA's Strategic Plan aligns with the broader RD&E priorities of our government investors.

Having regard to the priorities of industry and government, eight Key Focus Areas (KFAs) and associated RD&E objectives, deliverables, outcomes and measures of success are identified in SRA's Strategic Plan.

SRA has started the early stages of developing our next five-year Strategic Plan, a process that will involve extensive industry consultation in the latter part of 2016.

A consultation plan for the development of the new Strategic Plan will be developed and published in September.

To support the delivery of SRA's Strategic Plan, Operational Plans are developed annually. The 2016/17 Annual Operational Plan outlines the RD&E activities and investment portfolio that SRA will undertake to meet the objectives established under the Strategic Plan.

In delivering our Strategic Plan and Annual Operational Plans, SRA will continue to collaborate with our members, Delegates, levy payers, industry representative bodies, government, productivity services, extension providers, other industry stakeholders, researchers and international peers and partners.

Independent Performance Review

SRA commissioned its first Independent Performance Review in 2016 and this process is continuing throughout the calendar year.

All industry-owned organisations like SRA are required, under their statutory funding agreements with the Commonwealth Government, to commission regular independent performance reviews. SRA's Independent Reviewer is Scott Williams Consulting.

The findings and recommendations are expected to be finalised and a report provided to the Board in October 2016.

The SRA Board will then have three months to prepare a response and implementation plan for submission to the Commonwealth Government.

The report and SRA's response will then be published and widely communicated.

Board strategy – KFAs and Impact Areas

Throughout 2015/16, SRA has continued to galvanise our effort on the four Impact Areas that were identified by the SRA Board and Executive Team in 2015.

The specific short-term, high-priority Impact Areas that are being given greater emphasis in terms of RD&E activity and investment are:

- Yellow Canopy Syndrome (YCS);
- Plant breeding (conventional and GM);
- Adoption; and
- Harvesting efficiency.

These four Impact Areas exist beside the eight KFAs (see Appendix C) which were established to address the primary productivity, profitability and sustainability challenges and opportunities facing growers and millers.

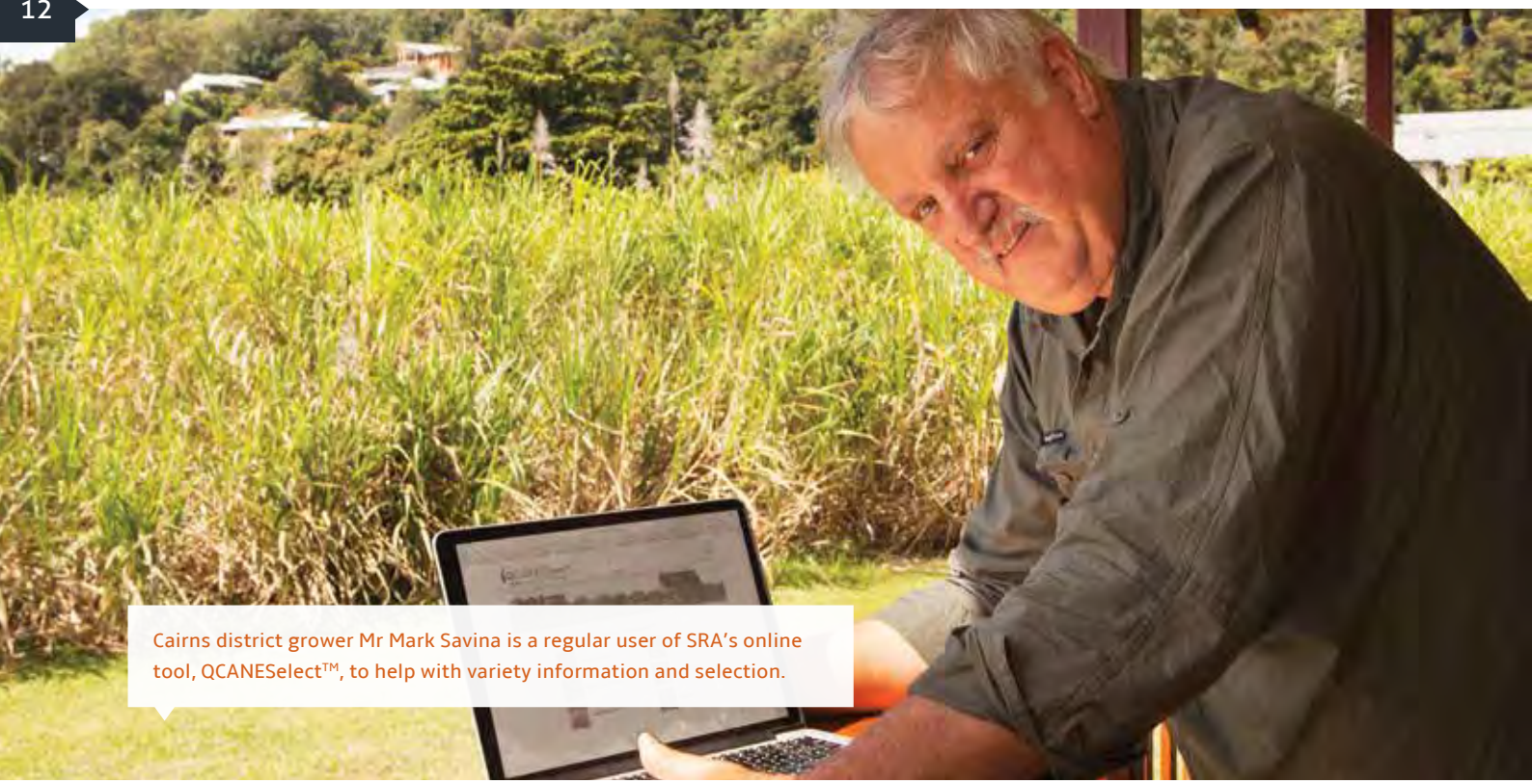
RD&E priorities

The KFAs and Impact Areas that underpin SRA's research agenda respond to the priority issues of the sugarcane industry and, more broadly, the priorities of the agricultural sector, government and the wider Australian public.

There is strong alignment across the priorities of the Australian sugarcane industry, the Commonwealth Government and the Queensland Government, particularly with respect to: productivity; industry and environmental sustainability; emerging technology; diversified product opportunities; technology transfer; best management practices; and enhancing scientific capability. A matrix detailing the alignment between the research portfolios under each of SRA's KFAs and the key industry and government priorities is provided in Appendix C.

SRA will report on the level of research investment against the new National Science and Research Priorities and the Rural RD&E Priorities in our 2016/17 Annual Report.

SRA Board Members during a visit to the Burdekin in February 2016: Dr Helen Garnett, Dr Guy Roth, Mr Mike Gilmour, Dr Ian Johnsson, and Mr Ian Sampson.



Cairns district grower Mr Mark Savina is a regular user of SRA's online tool, QCANESelect™, to help with variety information and selection.

Investment overview

SRA's investment in research is supported primarily through the statutory sugarcane levy of 70c per tonne of cane, with growers and millers each contributing 35c per tonne of cane. This is supported by funds from the Commonwealth and Queensland Governments, as well as minor income from other sources, such as interest and royalties from the use of intellectual property.

This revenue enabled an investment of approximately $17.5 million in contestable research and development in the 2015/16 financial year, and a projected $18.9 million in 2016/17. In addition, SRA continues to leverage further investment opportunities through other major research programs to further drive positive outcomes for investors.

The Commonwealth and Queensland Governments play an important role in the provision of significant funding towards RD&E.

Their investments, using public funds, help to deliver economic, social and environmental benefits to the general community.

The ongoing support of the Queensland Government recognises the vital role that the sugarcane industry plays in economic development and supporting jobs across the State and especially in regional areas.

Contestable funding program

SRA operates a contestable funding program that encourages researchers, and research organisations from the broader sugar research community and other sectors, to bring their best ideas to the industry.

The process has been established to provide a competitive, unbiased and independent assessment of research project submissions.

The contestable funding process is managed day-to-day by the staff of the Research Funding Unit (RFU), and the research agenda is overseen by the Research Funding Panel (RFP), an independent skills-based Panel appointed by the SRA Board.

The RFP ensures that through a rigorous and robust evaluation of all applications, only those research projects that address industry issues and national priorities are funded.

With accountability for all SRA-funded projects, every dollar invested in research will be used wisely to produce knowledge and practices that can be adopted on-farm and at the mill.

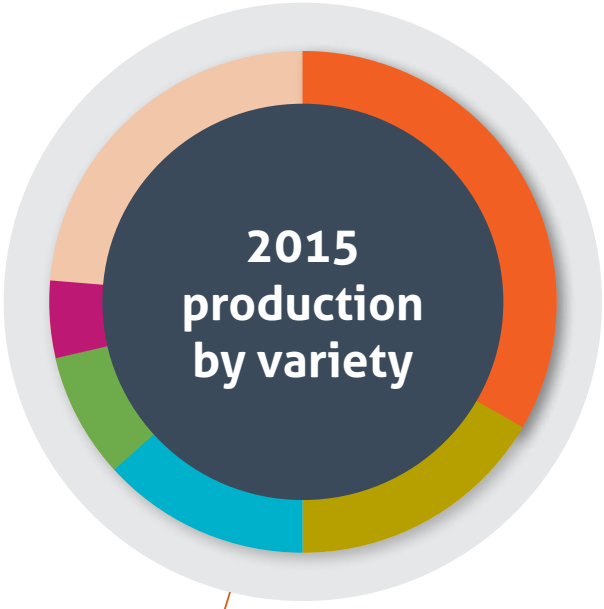
With a number of research projects underway from previous project calls, SRA has a substantive body of work underway and significant existing research commitments under its management.

Core research and activities

SRA continues to undertake core research activities that are crucial to the future of the Australian sugarcane industry, including activities in plant breeding and biosecurity.

These activities are conducted at SRA facilities across the industry.

Variety	%
Q208Ⓟ	33.3%
Q183Ⓟ	16.9%
KQ228Ⓟ	13.7%
Q200Ⓟ	7.5%
Q232Ⓟ	5.4%
Other varieties	23.3%



The top four varieties accounted for more than 70 percent of the total tonnes in the 2015 season

Ms Alison Jensen inspects the new variety, SRA4Φ.

Research highlights

SRA's investments in 2015–16 achieved significant outcomes on the priorities identified by our members, industry representative bodies, and wider stakeholders.

The pie chart shows the 2015-16 investment of $30.2 million over the eight KFAs.

KFA	Million	%
Key Focus Area 1 Optimally adapted varieties, plant breeding & release	$14.8	49
Key Focus Area 2 Soil health & nutrient management	$3.1	10
Key Focus Area 3 Pest, disease & weed management	$4.5	15
Key Focus Area 4 Farming systems & production management	$1.9	6
Key Focus Area 5 Milling efficiency & technology	$1.6	5
Key Focus Area 6 Product diversification & value addition	$0.8	3
Key Focus Area 7 Knowledge & technology transfer & adoption	$3	10
Key Focus Area 8 Capability development, attraction & retention	$0.5	2

KFA1: Optimally adapted varieties, plant breeding and release

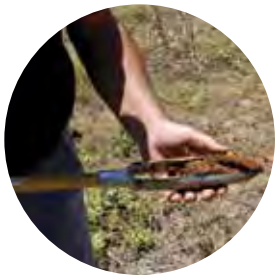
34.8 million tonnes
The biggest crop since 2006

13.81 average CCS

91.2TCH
The highest since 2005

381,776 hectares harvested
The highest since 2007

- Five new varieties (named SRA4[Φ], SRA5, SRA6, SRA7 and SRA8) were approved for release in 2016.
- In addition, the following varieties were approved for additional regions: SRA1[Φ] and SRA3[Φ] were approved for release in the Northern region and Q247[Φ] was approved for release in the Southern region.
- A total of 13 advanced clones were propagated for possible release in 2017.
- SRA imported 10 varieties from Brazil, six varieties from Japan, 13 varieties from Barbados and Reunion (via France), and 10 varieties from Vietnam. These were the first imports from RIDESA (Brazil), Japan, and Vietnam under new exchange agreements.
- New variety agreements were signed with Thailand (Mitr Phol), USA (USDA Canal Point and Houma), and Vietnam (Sugarcane Research Institute).
- QCANESelect™ was modified to include a Whole-of-Farm-Planning module, which will allow growers to manage their suite of varieties to minimise the risk of disease and improve productivity.
- A 40K Canechip was made available for genomic prediction in the sugarcane breeding program. This array was used for the first genomic prediction analysis in sugarcane and results indicate that this tool could be used to increase genetic gain in selection of parents in the breeding program.
- Over 150 clones from the SmutBuster program were repeated in Final Assessment Trials (FATs) and several hundred clones are to be propagated in 2016 for possible inclusion in 2017 FATs.
- 70 introgression families, derived from *Saccharum spontaneum, S. robustum, Erianthus arundinaceus*, and innovative crosses between *S. spontaneum and E. arundinaceus* were planted in a trial at Macknade.
- SRA made 351 field crosses in 2015 from 143 of 780 parents available.
- SRA made 1176 photoperiod facility crosses in 2015 from 350 of 415 parents available.
- A new collaboration between SRA and Sugarcane Breeding Institute (India) through Australia-India Strategic Research Fund was initiated, providing new opportunities for sugarcane variety and germplasm development.
- A collaboration between SRA and the University of Campinas, Brazil, identified commercially useful genes and germplasm for shortening the sugarcane crop cycle.
- Joint SRA and Yunnan Sugarcane Research Institute (China) research identified new germplasm suitable for improving yield in water-limited environments.
- Key traits for improving water use efficiency in sugarcane were identified in pre-breeding germplasm research, which will be evaluated in the SRA breeding program.
- Advanced-stage multi-location field trials of herbicide tolerant genetically modified (GM) sugarcane showed excellent levels of herbicide tolerance and cane yield and sugar levels, all equivalent to currently-grown non-GM commercial varieties.
- The development of a deregulation package for herbicide tolerant GM sugarcane continued and is expected to be completed in 2017.
- Research findings in sugarcane genetics provided a better understanding of the genetic control of critical traits, indicating that tonnes of cane per hectare (TCH) and commercial cane sugar (CCS) were under strong non-additive genetic control. The findings also indicated that calculating genetic distance using DNA markers would improve parental selection of clones to make new breeding populations.
- An SRA-led project analysing mill data in the Herbert River area identified many factors affecting productivity including adoption of new varieties, modern farming technologies, use of clean seed, and management of soil borne diseases. Recommendations from this research have been implemented by local advisory groups to design targeted extension strategies with the region.



KFA2: Soil health and nutrient management

- Research by Biological Crop Protection showed that in pot experiments in which sugarcane was grown in soils collected from different depths confirmed the observations made in the field; that plants grew much better in surface soils, with higher soil carbon levels than in soils from depths of 2.5-10 cm.
- Research by CSIRO (preliminary data) showed that for seven controlled release fertiliser products that the nitrogen (N) release patterns vary considerably and can broadly be grouped into three types: those releasing according with a short lag period (less than 1 week), those lacking a lag period and initially releasing N rapidly, and those having a long lag period. This third release pattern is needed to provide better synchrony with N uptake patterns.
- Early indications from research at the University of Southern Queensland indicated that Q200$^{\phi}$ is more nitrogen use efficient than Q208$^{\phi}$, with all forms of fertiliser.
- A nitrogen management workshop was conducted in Townsville (May 2016) to gain an understanding of stakeholder perspectives, an update on RD&E activities, and develop a way forward to improve nitrogen management in the sugarcane industry.
- Ideas to improve the SIX EASY STEPS™ nitrogen management framework were developed and research funding to validate this approach will be sought.
- Key small plot trials in Tully, Ingham, and Mackay were intensively sampled to assess temporal nitrogen uptake and nitrogen use efficiency (NUE) in sugarcane. Treatments were reapplied in order to continue this assessment for a further season.
- Nitrogen rates recommended using the SIX EASY STEPS™ methodology were validated in commercial scale trials across the Burdekin.
- Case studies were produced showing the economic benefit to growers when adopting nitrogen rates based on the SIX EASY STEPS™ methodology. These, as well as trial data and a video of grower participants, were presented at five workshops across the Burdekin region.
- SRA researchers identified climate zones and groups of soils that behave similarly under different climatic conditions for the Tully mill area to assist in the determination of productivity performance zones, which could be used to adjust yield potential across the region.
- Agricultural Production Systems sIMulator (APSIM) was used and was able to simulate cane yield responses to nitrogen fertiliser for two previous nitrogen response trials conducted in Tully. This will allow crop response to N to be simulated for a wider range of soil and climatic conditions and will be used to refine N recommendations for the Tully Mill area.

KFA3: Pest, disease and weed management

- A revised Industry Biosecurity Plan was developed and released by Plant Health Australia and endorsed by the industry (through CANEGROWERS Australia) and by the State and Federal Governments.
- A pre-commercialisation study to evaluate a new diagnostic for Ratoon Stunting Disease (RSD) was started in conjunction with support of productivity services organisations. The new assay will significantly reduce costs to productivity services and SRA by a quicker and simpler sampling method. The savings could be in the order of $40/ field sampled and annually Productivity Service companies sample 4000 to 5000 fields which would mean a saving of up to $200,000/year.
- Molecular studies of sugarcane downy mildew in Papua New Guinea revealed high pathogen diversity, with the possibility of a new species being discovered.
- SRA pathologists isolated and established laboratory cultures of the organism that causes chlorotic streak disease, the first time this has been done anywhere in the world. Sugarcane plants were infected by injection of the culture into roots or stalks, possibly opening the way to a rapid screening test for varietal resistance to this disease.
- SRA constructed a rainfall simulator that can be used to measure the run-off following different pesticide or nutrient applications under a set amount of artificial rainfall. The simulator will be used in both research and extension activities.
- A field trial conducted by SRA on herbicide phytotoxicity showed that, of the tested products, Daconate® had the greatest effect on cane growth while Krismet had no harmful effect, confirming pot trial results.
- In field trials of herbicides run by SRA, amicarbazone was nearly as effective as diuron high rate in most situations, especially against broadleaves and vines, but its efficacy did not last as long. The performance of imazapic and isoxaflutole varied in relation to the weed species present in the trials, and the diuron low rate was effective at controlling weeds for a short time only.
- The best cover crops to reduce weed coverage were assessed in two field trials conducted by SRA. Best results of cover crops to suppress weeds in far north Queensland were obtained using cowpea alone or mixed 50 percent with lablab. A high sowing rate increased the speed of cover crop establishment and coverage and decreased the amount of weeds.
- Analysis by the University of Queensland (UQ) of the ability of a SPOT-6 satellite image to detect canegrub damage in the Mackay region was similar to that of the higher resolution but more expensive GeoEye-1 imagery that has been used previously. This cheaper alternative is being evaluated in the Herbert and Mulgrave regions in 2016.
- Agtrix developed a pilot data hub for mill productivity data, a data translation table to translate class and variety attributes from different mills into a standard code, and an import script to transform and clean data. Data has been imported from several mills including 18 years of spatial and productivity data from Mulgrave Mill.
- SRA has collaborated with productivity services organisations (Herbert, Burdekin, Proserpine and Mackay) to establish trials in their respective districts to evaluate potential management options for YCS.
- In November, 2015, eight international experts (covering various plant biology disciplines) conducted an independent review of the entire YCS integrated program of research. The project was reviewed favourably by the expert panel, and all of their recommendations were incorporated into the research program.
- The SRA YCS project team worked collaboratively with Western Sydney University and CSIRO to test key YCS hypotheses under field conditions.

KFA4: Farming systems and production management

- Economic analysis of six harvest speed trials being conducted by Burdekin Productivity Services showed that harvesting costs decreased with increasing speeds up to 8-9 km/h but then levelled off, reinforcing the need for a system to compensate harvester operators for harvesting at slower speeds to minimise cane loss and stool damage.
- Satellite imagery allowed the University of New England to generate predicted yield maps for about 60,000 individual crops from 11 regions for the 2015 harvest season.
- The University of Southern Queensland (USQ) and CSIRO developed software that automates the procedure for developing a reliable yield map from harvester-mounted yield monitors, providing consistency in data handling and reducing handling time compared with previous manual methods. The prototype software tool will be tested in future harvesting seasons.
- Results of trials conducted by SRA of waterlogging tolerance of different varieties in pots and in field trials indicated that the size of plants at the time of waterlogging is very important in determining the harmful effect on plant growth, and differences among varieties in their speed of emergence or ratooning may be the main factor influencing apparent varietal tolerance.
- USQ and AgriTech Solutions installed automated furrow irrigation systems on three Burdekin farms, which allow the farmer to control, schedule and monitor the system from anywhere with internet access.
- Norris ECT commenced demonstrating SCHLOT (Sugarcane Harvesting Logistics Optimisation Tool) to the industry and collected data on the physical characteristics of major Australian varieties from various industry databases to include in the tool to improve its accuracy.
- A USQ and James Cook University (JCU) project led by Prof Roger Stone (USQ) interacted closely with the Bureau of Meteorology and other international agencies, and has reviewed performance of all seasonal climate forecasting systems (for example, models such as POAMA 2.4, UKMO, and SOI phases) over the years where they could have been in operation (hindcasts) and assessed the power for all sugar production regions in eastern Australian.
- A preliminary economic assessment of sugarcane farming systems containing fallow cash crops was conducted in collaboration with DAF.

KFA5: Milling efficiency and technology

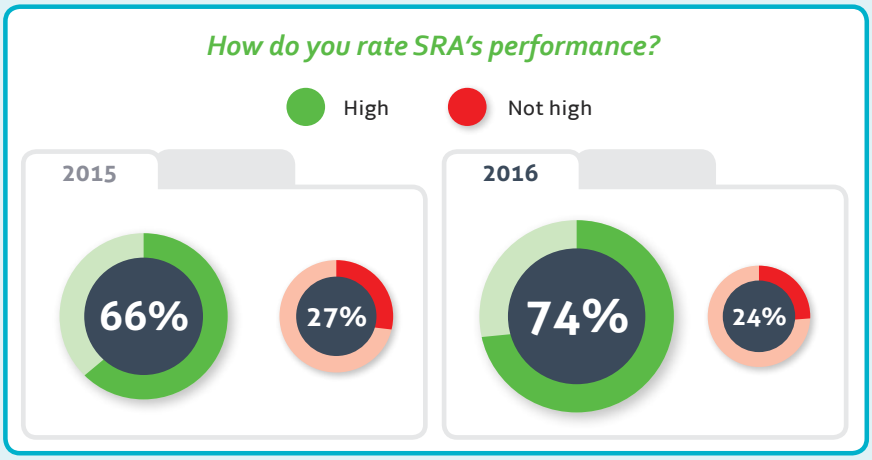
- Experimental investigations by the Queensland University of Technology (QUT) on different lengths and diameters of tubes in Robert evaporators allowed the university to develop engineering designs and estimate the capital cost for preferred designs in different situations.
- Measurements conducted by QUT showed a surprisingly large sucrose loss at one Australian sugar mill with a steam-efficient evaporation station compared with a less steam-efficient factory. A wider analysis of mills will be conducted in 2016.
- QUT researchers visited overseas mills to gather information on Kestner and falling film tube evaporators, and a detailed assessment of the suitability of Kestners for Australian factories as an alternative to Robert evaporators was completed.
- Progress was made towards managing the issues surrounding the marshalling yards and storage location of empty bins for scheduling purposes and upgrading Real Time Scheduling Software (RTSS) to support marshalling yards.
- Computational fluid dynamics modelling of scrubber design modifications was done in both a full scale scrubber and the scrubber scale model. Five wet scrubber design modifications were proposed and proposed design modifications were implemented in the scrubber scale model. The proposed scrubber design modifications have been sent to a scrubber manufacturer for comment. Feedback received will be incorporated into further modelling of design changes.
- A survey of industry was conducted to learn more about industry requirements for real-time sensors in the harvesting environment.

KFA6: Product diversification and value addition

- A pre-treatment reactor at a Mackay Pilot Plant was used for bagasse pulping process to produce black liquor that will be tested as a fertiliser in pot trials. The pulp will be evaluated for production of tissue paper.
- The Biorefineries for Profit Research Program engaged Australia's leading researchers in bio-refining to develop the technologies needed to convert Australian agricultural and forestry feedstocks into new value-added animal feeds, chemicals, and advanced fuels.

KFA7: Knowledge and technology transfer and adoption

- An economic case study conducted by DAF on a Far North Queensland multi-farm enterprise showed that adoption of Best Management Practice has helped to improve operating return by $150/ha/yr (total $124,500/yr), primarily through reduced operating costs (fertiliser -38 percent, tractor costs -35 percent and planting and harvesting costs -39 percent). There has been investment in capital goods to make change (+18 percent, repairs, maintenance and depreciation) and purchase of new equipment to implement change.
- AgProfit undertook some initial analysis of farm business performance in the Herbert over a six year period. The analysis of aggregated farm businesses has identified the profit drivers for the region; input costs are well managed but overhead costs are trending upwards and machinery and labour costs are relatively high, leaving less for growers to spend in other areas of their business and also reducing profit to growers.
- Outcomes of research and demonstrations on Harvest Best Practice conducted by SRA and Burdekin Productivity Services were presented at harvest forums throughout Queensland.
- SRA produced hard-copy publications including four ***Cane****Connection* magazines, two Milling Matters magazines, four YCS newsletters, three variety newsletters, 17 e-newsletters, a Precision Agriculture Manual, and Regional Variety Guides.
- SRA conducted introductory harvesting workshops to support the industry and address harvest losses through training. 146 people (mainly harvester operators) participated across five regions. A program of seven harvesting forums were also conducted across sugarcane growing regions with 215 people attending across the growing, milling and adviser sector.
- Growers were supported through delivery of 24 BMP Workshops with 370 growers, millers, and advisers attending.
- SRA provided the milling sector with the latest research information through regional research seminars, a sugar quality workshop, and webinars, attracting over 160 participants from the milling sector.
- SRA provided a vital link between researchers and growers across all regions through field walks, bus tours, grower meetings and research forums, covering every sugarcane region in Queensland and NSW and attracting over 2000 growers.
- SRA engaged with growers across all sugarcane growing regions in collaboration with local extension providers through field days, information days and shed meetings.
- SRA conducted its second grower survey of 400 farmers in order to identify industry priorities and assess SRA's performance, with all key performance measures improving in the 2016 survey when compared to 2015 (see graphic below).
- An economic survey of the industry by ABARES analysed farm financial performance in 2013/14 and revealed the top 25 percent of businesses had an average rate of return of 4.5 percent, not including capital growth in their land. The bottom 25 percent of farms had a negative 9 percent rate of return and had to rely on off-farm income to survive.



KFA8: Capability development, attraction and retention

- SRA Researcher Dr Danielle Skocaj completed her PhD thesis that significantly advances the application of climate forecasting indices for nitrogen fertiliser management in agricultural crops and improves the understanding of nitrogen recovery by sugarcane crops.
- An SRA-funded PhD study has shown that under well-watered conditions there is significant variation in transpiration efficiency (TE) among sugarcane genotypes.
- SRA continued to invest in industry capacity and development, specifically through: two Early/Mid-career research awards; 15 new travel and learning awards; three new postgraduate research scholarships; and one senior sugar industry leader was sponsored to attend the Training Rural Australians in Leadership (TRAIL) Blazers course.

Burdekin grower Mr Steve Pilla talks about the new Burdekin variety SRA8 with Variety Officer Ms Catherine Kettle and grower and Delegate Mr Laurence Dal Santo.

Response to Impact Areas

The SRA Board has identified four strategic Impact Areas that require priority investment for the Australian sugarcane industry.

These four impact areas are solving Yellow Canopy Syndrome; conventional and GM plant breeding; harvesting efficiency; and improving adoption of research on-farm and at the mill. These Impact Areas exist alongside the KFAs developed in SRA's Strategic Plan and have been identified as priority areas of activity. This strategic response to key issues allows SRA investment to continue to take a long-term view, while also being adaptable to immediate challenges and opportunities.

Yellow Canopy Syndrome (YCS)

YCS is a disorder of unknown cause that can create severe production losses for impacted growers, and in the worst cases losses of greater than 40 percent have been observed.

As at March 2016, YCS had been observed in all growing regions from Maryborough north, after its confirmation in the Southern Region at this time.

Given the extent of YCS and its potential for severe losses, SRA is responding via an integrated research program that spans several projects and multiple leading research institutions. Throughout 2015-16, this included four projects underway looking at various aspects of YCS: two at SRA, one at the Western Sydney University, and one at CSIRO.

As part of that strategic approach, the SRA Board commissioned an external review of the YCS research program to identify gaps in the research effort and to ensure that the research was well-targeted.

This review in November 2015 was also a chance for researchers to hear from outside scientific leaders to assist them to investigate new leads and refine their research and trials.

The external review added to the scientific rigour already provided by the Scientific Reference Panel (SRP), which consists of Prof John Lovett (Chair), Dr Andre Drenth, Dr Geoff Inman-Bamber, and Prof Roger Hellens.

The table opposite describes key observations that researchers within the Integrated Research Program have defined in relation to YCS research as at June 2016.

The Expert Panel invited to comment upon the YCS research program: Prof John Randles, Dr Graham Bonnett, Prof Blake Bextine, Adj/Prof James Ridsdill-Smith, Dr Robert Osgood, Prof Jeffrey Hoy, Prof Randy Ploetz, and Adj/Prof Melvin Oliver at the SRA Meringa research station.

Water:

1. Irrigate for maximum productivity, not for YCS management
2. YCS onset cannot be prevented through irrigation

Translocation:

1. Translocation of sugars is compromised
2. Water movement in the plant is compromised

Biotic:

1. YCS is not associated with a known Australian sugarcane pathogen

Nutrients:

1. Fertilise for maximum productivity, not for YCS management
2. Application of organic amendments do not alleviate YCS symptoms

Diagnostics:

1. Sugar and starch levels in the leaf can be used as a potential diagnostic
2. Silica and Magnesium ratio in the leaf is a potential diagnostic tool

Agrochemicals:

1. Imidacloprid does not alleviate or prevent yield impacts of YCS
2. Glyphosate or its derivative residues do not cause YCS

Environment:

1. Environmental stress amplifies YCS expression
2. YCS is independent of time of planting, crop age and crop cycle

Conventional and GM plant breeding

SRA investment in conventional and GM plant breeding is the biggest focus of our research investment via both core SRA activities and contestable research investment.

The primary driver of this is the SRA breeding program, which continues to deliver new varieties for the industry.

The program has an objective of delivering three new varieties per region in a five-year period, a benchmark that SRA continues to exceed.

In 2016, SRA released five new SRA canes called SRA4[Φ] (Southern), SRA5 (Herbert), SRA6 and SRA7 (North) and SRA8 (Burdekin).

SRA and external researchers are also continuing to look at innovative solutions to improve the breeding process, including reducing the time it takes to develop new varieties via innovative research looking at molecular markers.

In 2015, the Australian Sugar Industry Alliance also confirmed a new economic weighting for traits used in the breeding program.

SRA's research into GM sugarcane that is herbicide tolerant is continuing and is on track, although there remain a number of regulatory and other issues that require further activity.

Harvesting efficiency

Losses from mechanical sugarcane harvesting have been conservatively estimated to cost the Australian sugarcane industry $150 million per year.

Recognising the opportunity to recapture some of that value, in June 2016 the Commonwealth Government confirmed that SRA was successful in securing investment in a major harvest losses research project as part of the Rural R&D for Profit Program.

This represents a new $5.5 million investment (plus in-kind) that will work with a range of collaborators and research partners to take a holistic approach to improving harvesting efficiency. It builds on previous work that has already occurred, and complements existing research activities.

This project is supported by funding from the Australian Government Department of Agriculture and Water Resources as part of its Rural R&D for Profit program.

In addition to this major research project, SRA has also invested in two new research projects over the last 12 months, which included a project on the Sugarcane Harvest Logistics Optimisation Tool (SCHLOT), led by Norris ECT, and a feasibility study into improving sensors, led by SRA. This also adds to the existing project *Increased harvest recovery: reducing sugar loss and stool damage*.

Adoption

SRA is continuing to enhance and refine the way it seeks to deliver improved adoption of research for sugarcane growers and millers. A key foundation of that is ensuring that new research projects are structured in a way that ensures they have potential to lead to tangible and practical outcomes for the industry.

Building on that is ensuring that the industry is able to best access this research, and past research, to its maximum benefit. This adoption activity is driven by the SRA Adoption Group, which focuses strongly on regional adoption in their respective regions, and a discipline focus. The Adoption Group is continuing to enhance its strategic approach to delivering industry priorities.

Through the efforts of the Adoption Group, SRA has played a role, in partnership with local organisations, in creating positive changes that will benefit the industry. Some examples of adoption in action include:

- Adoption of the sucrose loss calculator and trailer.
- Adoption of best harvest practices to reduce harvest loss.
- Adoption of tissue culture – a new method of delivering varieties to growers.
- Burdekin nitrogen trials – a commercial trial that has encouraged growers involved in the trials, as well as other growers in the region, to apply efficient nitrogen to their crop, while maintaining high yields.

Growers are also acknowledging adoption of new methods with 62 percent of farmers reporting to SRA via the 2016 grower survey that they have changed on-farm practices over the past two years.

The most common changes are fertiliser management, reducing tillage and chemical applications.

In addition, over the past year, significantly fewer farms are using excessively high or low fan speeds on their primary extractor than the year before, indicating that the harvesting campaigns and education programs are having a positive effect on-farm.

SRA's strategic framework for delivering valued sugarcane RD&E

Sugar Research Australia™

Our vision

Delivering valued solutions for a growing Australian sugar industry

Our purpose

Undertaking targeted research, development and adoption programs for the sugar industry

Our Key Focus Areas

1. Optimally-adapted varieties, plant breeding and release
2. Soil health and nutrient management
3. Pest, disease and weed management
4. Farming systems and production management
5. Milling efficiency and technology
6. Product diversification and value addition
7. Knowledge and technology transfer and adoption
8. Capability development, attraction and retention

Our Impact Areas

1. Yellow Canopy Syndrome (YCS)
2. Plant breeding (conventional and GM)
3. Adoption
4. Harvesting efficiency

Our operational objectives

1. *Embed performance leadership and culture*
2. *Improve financial management and budgetary control*
3. *Enhance investor relationships and communication*
4. *Enable corporate support systems*
5. *Augment contestable investment governance*

Our values

Innovation

Investor satisfaction

Accountability

Teamwork

SRA Technician Mr John Panitz received the contribution to productivity award in the southern region in 2016.

Pictured at chlorotic streak trials at Woodford are Dr Priyanka Wickramasinghe, Dr Kathy Braithwaite, Mr Barry Croft, Ms Mona Singh, and Dr Chuong Ngo.

People

SRA recognises the value of and the integral role our people play in the pursuit of our vision: ***delivering valued solutions for a growing Australian sugar industry.***

The SRA Board and management have worked with the industry since the creation of SRA to drive a high-performance culture at SRA where excellence is encouraged and rewarded, thus delivering optimal outcomes for the industry.

SRA has developed internal values as a collaborative process across the company. These values are: accountability, investor satisfaction, innovation, and team work. These values are focused on the dual outcomes of delivering outcomes for SRA investors and ensuring that SRA is a rewarding place to work.

This has been enhanced by a human resources strategy that uses best practice principles – employee professional development, a range of entitlements and benefits, and effective learning – to build the company's capacity to deliver world-class research that meets industry's needs.

SRA is very proud of the achievements of our people in their service to industry. Outstanding performance in research is recognised by various national and international awards.

Each year the President of the Australian Society of Sugar Cane Technologists (ASSCT) awards high achieving researchers in the industry. At the 2016 conference at Mackay, SRA staff received the following awards:

- Best poster in the agricultural section went to Ms Zofia Ostatek-Boczynski (SRA), Mr Dave Olsen (SRA), Dr Farzana Darain (UQ), Prof Bernard Schroeder (NCEA, USQ) for the poster: *Nutrient uptake mechanisms in YCS affected sugarcane*.

- Best poster in the manufacturing section went to Ms Eloise Keeffe, Mr Steve Staunton, Mr Joel Simpson, Ms Peimaneh Lee-Steere, Ms Laura Donnan, and Dr David Donald.

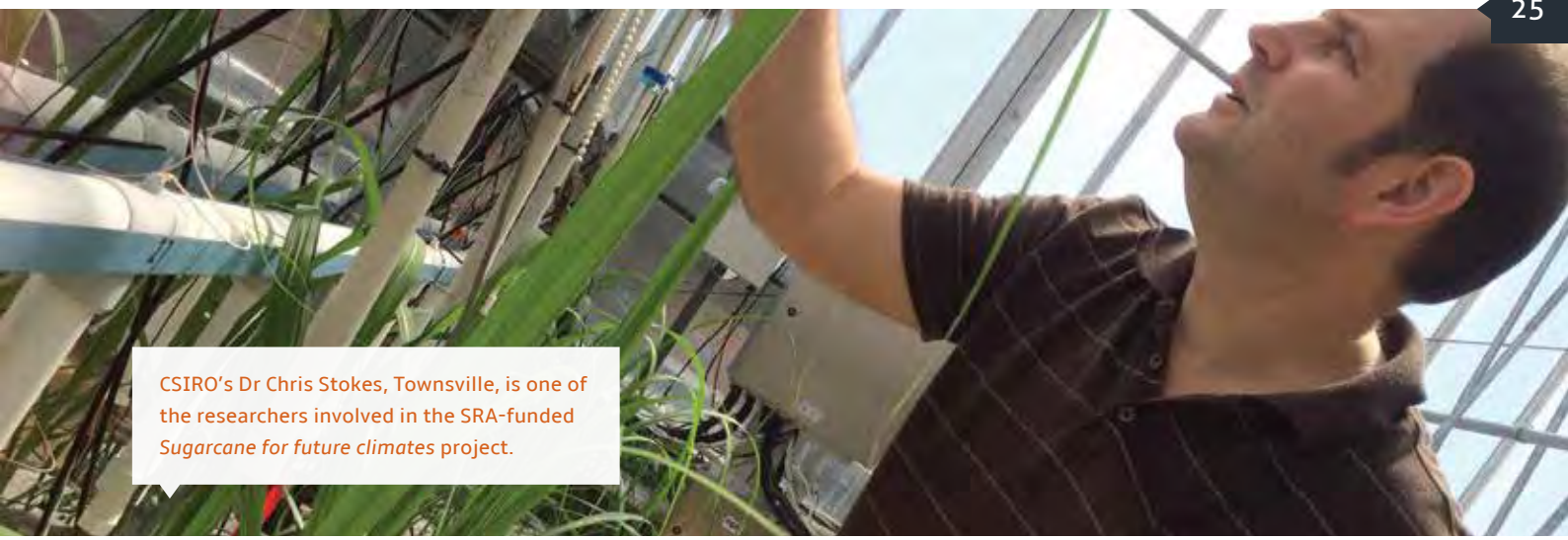
- Best research paper went to an SRA-funded research project led by the University of New England under the title *Evaluating remote sensing technologies for improved yield forecasting and for the measurement of foliar nitrogen concentration in sugarcane*. The paper was authored by Dr Andrew Robson (UNE) as the lead author and had SRA staff as co-authors Dr Prakash Lakshmanan, Dr Barry Salter, and Dr Danielle Skocaj.

- Long-term industry researcher and SRA KFA Leader, Mr Barry Croft, was appointed as a life member of ASSCT.

Other notable staff achievements include:

- Bundaberg technician Mr John Panitz received the Bundaberg region contribution to productivity award for his outstanding contribution to the wellbeing of cane growers through the enhancement of individual growers' productivity and district productivity. Mr Panitz has been involved in the sugar industry since 1976. He has worked in research, plant breeding, variety trials and selection and in disease monitoring and management.

- SRA's research station at Mackay became Smartcane BMP accredited in June 2016, thanks to the work of farm manager at Mackay, Ms Annette Corcoran, and other SRA staff.



CSIRO's Dr Chris Stokes, Townsville, is one of the researchers involved in the SRA-funded *Sugarcane for future climates* project.

Research collaborations

SRA undertakes cross-sectoral collaboration and continues to invest in leveraged research activities with other Research and Development Corporations (RDCs) to benefit both the Australian sugar industry and the broader Australian community.

These collaborations, which take many different forms and vary in scale, are an important way to achieve greater outcomes from investments than would otherwise have been achieved alone.

The improved communication and coordination within these activities helps to better disseminate R&D activities and outcomes across different industries and improves the prospects of future collaboration.

Cross-sectoral R&D

SRA currently invests in and collaborates on cross-sectoral R&D in the strategy areas outlined below within the National Primary Industries RD&E Framework.

SRA participates in these strategies as an investor, participant, program manager or steering committee member.

- ***Biofuels and bioenergy***

  This strategy acts as a forum to provide opportunities for collaboration and communication, encourage knowledge sharing and resource efficiency, lead appropriate R&D activities and update the national RD&E strategy and priorities.

- ***Climate Change Research Strategy for Primary Industries***

  This strategy aims to prioritise and direct research funds on priority climate change research, identify key research organisations and research capacity, collaborate broadly to conduct R&D activities and to communicate with government and policy makers on climate change issues.

- ***Managing Climate Variability***

  This program funds research into climate forecasting tools and supports knowledge and communication activities to increase the understanding and uptake of climate-related opportunities that benefit agriculture and Australia's natural resources.

- ***Water use in agriculture***

  This strategy aims to achieve world-leading farm water productivity within Australian agriculture, while enhancing environmental and social sustainability and maximising RD&E benefits.

- ***Plant biosecurity***

  This strategy is led by Plant Health Australia with the goal of protecting Australia from the negative effects of plant pests, sustaining food supply quality and supporting long-term sustainable production practices.

- ***Soils***

  This national strategy aims to improve soil management to increase productivity and profitability, enhance soil mapping, develop better ways to manage soils and soil constraints, and grow the understanding of the role of soils in natural ecosystems.

Other research activities that fit within the cross-sectoral investment theme include participation within:

- ***National Working Party for Pesticide Application***

  This working party is a forum to assist with understanding Australian Pesticides and Veterinary Medicines Authority (APVMA) policies, provision of practical risk management advice, and the facilitation of targeted research in areas such as managing pesticide spray drift and downwind buffers.

- ***Improved access to Agvet chemicals for agricultural industries***

  This program aims to determine priorities for chemical access and develop frameworks to specific case studies to quantify industry benefits. It also seeks to develop measures to understand industry reliance on chemicals and enable comparisons across different primary industries.

Rural R&D for Profit

This program aims to realise productivity and profitability improvements for primary producers via funding collaborations between rural IOCs and RDCs and other research partners. SRA has already begun collaborations under round one of this program, which includes the following projects:

- A profitable future for Australian agriculture: biorefineries for higher-value animal feed, chemicals and fuel, led by SRA (total project investment $6.09 million).
- Improved use of seasonal forecasting to increase farmer profitability, led by Rural Industries RDC (total project investment $3.8 million).
- Waste to revenue: novel fertilisers and feeds, led by Australian Pork Limited (total project investment $2 million)
- Smarter Irrigation for Profit, led by Cotton Research and Development Corporation (CRDC) (total project investment $10 million).
- Stimulating private sector extension in Australian agriculture to increase returns from R&D, led by Dairy Australia (total project investment $3.09 million)
- Consolidating targeted and practical extension services for Australian farmers and fishers, led by Rural Industries RDC (total project investment $1.6 million).

In addition, SRA has leveraged further investment for the Australian sugarcane industry under round two of the program. As part of this round, SRA is leading a major research investment into improving harvest efficiency, with a range of collaborators. This $5.5 million investment will span three years and take a holistic approach to delivering benefits to the value chain. In addition, SRA is participating in these round two projects:

- More profit from Nitrogen, led by the CRDC (total project investment $5.9 million).
- Accelerating precision agriculture to decision agriculture, led by the CRDC (total project investment $1.4 million).

Research collaborations

SRA has strong research partnerships with many leading universities and research institutions. SRA partners with other organisations to leverage valuable resources to deliver optimum outcomes for the Australian sugarcane industry. We have working research relationships with the following institutions:

University of Queensland	CSIRO
University of Southern Queensland	Queensland University of Technology
James Cook University	NSW Sugar
Agtrix	Plant Health Australia
Biological Crop Protection	Ag Profit
Queensland Department of Agriculture and Fisheries	Productivity Services organisations
University of New England	Bio Active
Western Sydney University	Crop Care Australia
Biological Crop Protection	DuPont
Queensland Department of Science, Information Technology and Innovation	Department of Environment and Heritage Protection
Norris ECT	AgResearch
Milling companies	Private sector

International collaborations

SRA collaborates with sugar-related research institutes around the world. We have variety exchange agreements with sugarcane breeding countries such as Brazil, Guatemala, the United States of America, China, Japan, Sri Lanka, Mauritius, Vietnam and Reunion (via France). SRA continues to collaborate with other countries in ways that could enhance the genetic material being used in the industry's plant breeding.

In 2016, SRA announced an historic collaboration with the Sugarcane Breeding Institute in Coimbatore, India, with funding through the Australia-India Strategic Research Fund (AISRF). The project will identify genetic markers for cane yield, sugar content, drought tolerance and red rot resistance, using sophisticated biotechnology. It builds on previous investment made by the Australian sugar industry in developing this technology jointly by SRA, CSIRO, and Syngenta.

In November 2015, SRA plant breeders also strengthened ties with the Sugarcane Research Center, Chinese Academy of Agricultural Sciences at Guangxi Academy of Agricultural Sciences (GXAAS). They visited the Centre as its guests and all expenses associated with the trip were borne by GXAAS. The main purpose of the trip was to discuss crossing/photoperiod processes and techniques, and possible collaboration in germplasm (seed and clones) exchange, and sugarcane breeding for drought and cold tolerance.

Victoria Estate grower Mr Chris Bosworth is one of two Group G (grower) Delegates for the Herbert region.

Members and Delegates

All grower and miller levy payers were invited to become members of SRA. As members they can directly engage with our company in a number of ways, including being permitted to vote at general meetings, nominating for election to the Director Selection Committee (DSC), and nominating or being nominated as a Delegate.

As at 30 June 2016, SRA had 8 Group M (miller) members and 2390 Group G (grower) members.

SRA held a meeting of its Delegates on 26 April 2016 in Mackay, in conjunction with the ASSCT conference. This meeting is part of a new strategy being adopted by SRA to improve the interaction with Delegates, and other activities will include twice-yearly group meetings of the Delegates and more dedicated communication with Delegates during regional Board visits. The Delegates will play an important role in relation to the assessment of the Independent Performance Review of SRA.

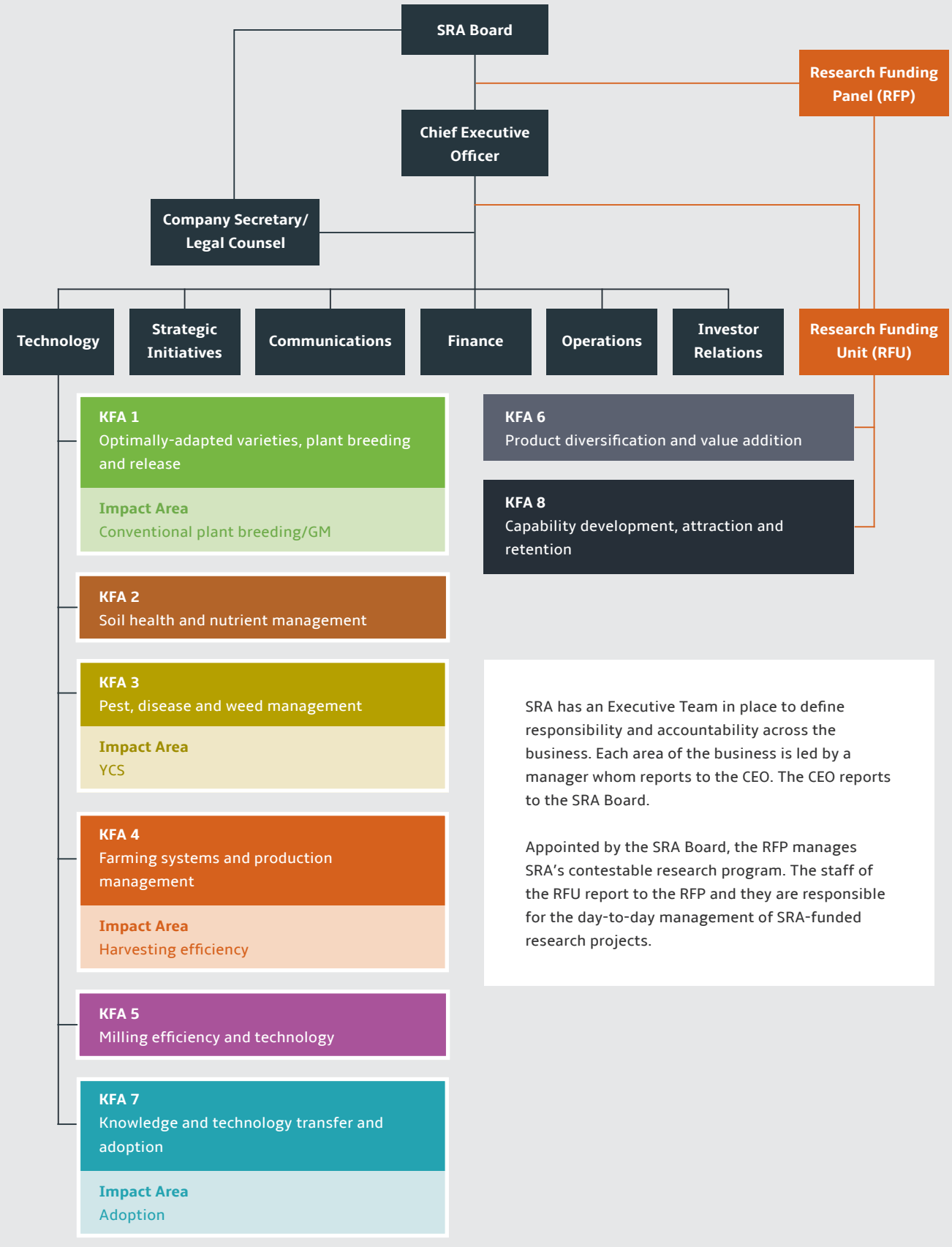
SRA is continually working to improve our communication with Delegates and ensure that they are a strong link between the entire growing and milling communities and SRA.

At the meeting, the Group G Delegates and Group M Delegates separately resolved to elect their member representatives to the SRA Board DSC for 2016:

Group G	Group M
Paul Schembri	John Pratt
Allan Dingle	Peter Gill

The SRA Board appointed Ms Kathryn Adams as the independent Chairman of the DSC for 2016. Ms Adams is currently a member of numerous Boards including of the Cotton Research and Development Corporation and of several Cooperative Research Centres. She has also held high-level positions in research agencies and government departments. The DSC will select three Board positions ahead of the SRA Annual General Meeting in October 2016.

Company structure



SRA has an Executive Team in place to define responsibility and accountability across the business. Each area of the business is led by a manager whom reports to the CEO. The CEO reports to the SRA Board.

Appointed by the SRA Board, the RFP manages SRA's contestable research program. The staff of the RFU report to the RFP and they are responsible for the day-to-day management of SRA-funded research projects.

Corporate governance framework

Sugar Research Australia Limited ("**SRA**" or "**Company**") was incorporated on 8 May 2013 as a public company limited by guarantee. SRA is an industry-owned corporation with a membership consisting of grower and miller members.

SRA operates within a corporate governance framework consisting of the *Corporations Act 2001* (Cth) supervised by the Australian Securities & Investments Commission (ASIC), other relevant laws and its Constitution. SRA is the "industry services body" as declared for the purposes of the *Sugar Research and Development Act 2013* (Cth). As such SRA is party to a Statutory Funding Agreement 2013-2017 (dated 5 August 2013) with the Commonwealth of Australia represented by the Department of Agriculture.

In developing and implementing SRA's corporate governance framework and practices SRA has taken into account the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations (3rd edition)*.

The Constitution, the Statutory Funding Agreement and other documents and policies relevant to SRA's corporate governance framework (including a Governance Policy) are available on SRA's website at www.sugarresearch.com.au.

Constitution

SRA's Constitution contains rules regarding, among other things:

- the objects of the Company;
- activities not permitted by the Company (including agri-political activities);
- criteria for eligibility for membership as a Group G member or Group M member;
- voting procedures and entitlements for members' meetings;
- appointment of Group G and Group M Delegates;
- requirements for strategic and annual operating plans and reviews of performance;
- composition, selection, election and rotation of the Board and various committees;
- procedures for Board and committee meetings;
- reporting responsibilities to its members (in conjunction with the *Corporations Act 2001* (Cth).

Statutory Funding Agreement

Under the Statutory Funding Agreement, the Commonwealth has agreed to pay the Sugarcane Levy paid by sugarcane growers and millers to SRA, together with Commonwealth matching payments. The Statutory Funding Agreement sets out how these payments are to be used and the requirements that SRA must follow in relation to:

- research, development and extension activities;
- Corporate governance and Board performance;
- Application and management of the Sugarcane Levy and matching Commonwealth funds in compliance with various Commonwealth guidelines;
- Reporting and accountability obligations of SRA including Strategic Plan, Annual Operational Plan, Risk Management Plan, Fraud Control Plan, Intellectual Property Management Plan and Asset Management Plan; and
- Procedures and requirements for consultations with the Commonwealth.

SRA membership

Under the Constitution, there are two classes of members: Group G members and Group M members. A sugarcane growing business or milling company who pays the Sugarcane Levy in the calendar year concerned (or previous calendar year) is eligible for membership of SRA. Group G members and Group M members can participate in general meetings of the Company and in the election of Directors.

As at 30 June 2016, there were 8 Group M members and 2390 Group G members.

SRA delegates

The Constitution sets out the process for the nomination, election and appointment of Group G Delegates and Group M Delegates (together 'Delegates'). The role of each Delegate is pivotal to the membership-related governance processes of SRA.

The primary role of Delegates, as prescribed under the Constitution, is to attend Delegates' meetings, as scheduled by SRA, for the purposes of:

- Considering matters relating to Performance Reviews and the Sugarcane Levy
- Voting to elect SRA's Director Selection Committee members (26 April 2016).

A list of the current Delegates and the mill areas they represent is available in Appendix B of this report and on the SRA website www.sugarresearch.com.au.

Corporate governance

The Board

The Board has adopted a Board Governance Policy which details:

- The constitutional requirements for Board composition and eligibility
- Procedures for Board meetings and Board minutes
- Directors' access to information, advice and staff
- Board induction process
- Directors' professional development
- Board performance evaluation
- CEO performance evaluation.

Composition

As at 30 June 2016 and the date of this Annual Report, the Board comprised seven non-executive directors ('Directors'). Under SRA's Constitution, the Board must have a balance of appropriate and identified skills and experiences, having regard to the nature and business affairs of the Company and needs to demonstrate collective expertise against each of the following:

- Corporate governance (*including organisational/cultural change*);
- Chairing a board;
- Communication skills and ability to interrelate with industry and other investors;
- Sugarcane growing;
- Sugarcane processing for any product;
- Crop-based agriculture;
- National and international Research and Development ("R&D"), technology, technology transfer, commercialisation and adoption ;
- Conservation and management of natural resources;
- Administration. prioritisation, oversight, monitoring of R&D; and
- Finance and business management.

As required by the Constitution, the Board undertook an annual review (prior to 30 June 2016) of the skills required to effectively lead and manage the Company and contribute to Board processes and advised these to the Director Selection Committee.

Board members

The names and details of the Company's Directors in office during the reporting period and until the date of this report are listed on pages 36.

Role and responsibilities of the Board

SRA's vision is to deliver valued solutions for a growing Australian sugar industry and its purpose is to undertake targeted RD&E programs for the Australian sugar industry. The Board seeks to carry out the Company's objects set out in the Constitution and guide its strategic direction.

The role and responsibilities of the Board are set out detail in a formal Board Charter. More specifically, the Board's responsibilities include:

- ensuring the Company has an appropriate corporate governance structure;
- monitoring and assessing the Company's performance against the Strategic Plan and Annual Operational Plans;
- monitoring compliance with legal and regulatory obligations;
- monitoring SRA's risk management systems and processes;
- providing accountability to SRA members, investors, and stakeholders;
- appointment and oversight of the chief executive officer;
- ensuring adequate resourcing to meet objectives of the Company;
- monitoring and reviewing succession planning for executive management;
- establishing Board committees with roles and responsibilities, delegations and reporting frameworks;
- making sound financial decisions; and
- reviewing and approving policies, plans, performance targets and budgets.

Rotation of the Board

The Constitution provides for three year periods of office for Directors.

Directors are to rotate from the second and each subsequent Director Selection Committee process outlined in the Constitution. The third Director Selection Committee process will occur before the Annual General Meeting in 2016. The Constitution provides that 40% (to the nearest whole number) of the Director positions must be open for review and selection by the Director Selection Committee and subsequent recommendation for election by the members of SRA. Vacancies created when Directors retire by rotation allows the Board's composition to be reviewed annually to ensure that it continues to align with the skills and experiences necessary to effectively lead and manage the Company.

Board meetings

The Board held six scheduled meetings during the financial year ending 30 June 2016, two of which were held in sugarcane regional locations.

Meeting agendas are formulated in preparation for each Board meeting and also include items from an annual Board reporting agenda that sets out various items to be considered and reviewed throughout the year. These items include reviews of the Company's strategic environment, KFAs, Impact

Areas, operational and industry issues and forecasts. Regular management reports, Committee reports, WH&S reports and Risk Management reports are prepared for each Board meeting. The annual reporting agenda also sets review dates for items that must come before the Board under performance, compliance and governance. Meeting agendas are set by the Chairman in consultation with the chief executive officer and company secretary.

Where necessary, management attends and provides input into agenda items of particular Board meetings relevant to their portfolios. Directors have regular exposure to management and other employees through convening every second Board meeting at a regional location. At these regional visits the Board meets with SRA employees, industry bodies, growers and millers and attends industry forums and events.

Directors receive regular reports from the chief executive officer on the Company's activities since the last report to Directors, including information on research and other projects, variety improvement, farming and extension services, financial performance and strategic initiatives and performance against the Strategic Plan and the eight KFAs. Matters arising from these reports are discussed at Board meetings.

The Board regularly considers and discusses strategic issues and the eight KFAs set out in the Strategic Plan and matters that may assist to further promote and develop the Company's role in providing RD&E services to the Australian sugar industry. During the reporting period, the Board participated in a formal strategic planning workshop with the Executive Team in April 2016.

Code of Conduct

The Constitution requires, and the Board has adopted, a Code of Conduct ("Code") for Directors, Senior Officers, Delegates, and Committee members (together "Office Holders"). The Code includes provisions, among other things, relating to:

- use and disclosure of information;
- receiving, keeping, holding and reporting gifts of any description by Directors and senior officers of the Company;
- conflicts of interest and duty; and
- ethical behaviour by the Company, Directors and its senior officers in relation to the Company's affairs.

Under the Code, all Office Holders must act in accordance with seven fundamental principles of selflessness, integrity, objectivity, accountability, openness, honesty and leadership.

By accepting appointment as an Office Holder, each Office Holder agrees to be bound by and comply with the Code.

During the reporting period, no material breaches of the Code were reported to the Board or came to its notice.

Conflicts of interest

Each Director provides information about their business and other interests to the Board at the time of their appointment and this information is updated following further notifications by a Director.

The Board has adopted a Declaration of Interests Policy which applies to all Office Holders (as defined above in *Code of Conduct*).

Independent advice

The Constitution recognises there may be occasions when the Board as a whole, or Directors as a group or as individuals, believe it to be in their interests and in the interests of the Company to seek independent professional advice, on matters such as accounting, taxation or law, at the company's expense. Requests for the provision of such advice are to be directed to the Chairman or the Company Secretary.

Board performance

Under the Board Governance Policy, the Board must conduct an annual review to evaluate performance of the Board as a whole, the Chairman, each individual Director and committees as it considers appropriate. The Board uses independent consultants to assist in performing the annual Board performance evaluation.

Delegations to management

The Board has delegated responsibility for management of SRA's day to day operations to the chief executive officer.

SRA has a formal policy on delegations and authorities, which sets out levels of financial and contractual delegations to management and staff.

Board committees

SRA has established four committees (each a "Committee") as follows:

- Audit and Risk Committee
- Remuneration and Appointments Committee
- Research Funding Panel
- Director Selection Committee.

Each Committee has a charter setting out its roles and responsibilities. The Audit and Risk Committee and Remuneration and Appointments Committee are comprised solely of non-executive Directors, with management attending Committee meetings by invitation only. The Research Funding Panel is a Committee of the Board and was comprised of an independent Chair and four other independent people appointed by the Board plus one Director of SRA. The Director Selection Committee is comprised of an independent Chair appointed by the Board and two members each elected from Group G and Group M representatives by the respective Group G and Group M Delegates.

The members of each Committee, together with each member's attendance at meetings are set out in the Director's Report on page 39.

Audit and Risk Management Committee

The Audit and Risk Committee reviews, on an ongoing basis, a suite of reports that cover SRA's operational and strategic performance. The suite of performance reports that are considered by the Committee include: SRA operational reports, such as Finance, Workplace Health and Safety and Risk Management, and Research Funding Unit reports on the investment project portfolio. Where required, the Committee provides the Board with recommendations for remedial action to be taken to ensure SRA's operational and strategic performance remains on-track.

The Committee has formal terms of reference approved by the Board as detailed in its Charter.

The key functions and accountabilities of the Audit and Risk Committee and which are set out in its Charter are as follows:

- To assist the Board in ensuring that the Company understands key risks for the Company and complies with its legislative and other obligations;
- To review the internal processes for identifying, monitoring and managing key risks for the Company;
- To review and monitor any transactions with related parties or agri-political organisations;
- To review the external auditing of the Company, including making recommendations to the Board on the qualifications, appointment, remuneration and monitoring of the Company's external auditor;
- To review the internal auditing of the Company, including the systems and procedures for that auditing, and reporting results of those audits;
- To review the external reporting of significant financial information about the Company to improve its objectivity and reliability; and
- To review the Board and Company procedures and practices relating to the SRA Research Funding Panel and the overall conduct of research and research management functions.

The Audit and Risk Committee consists of Mr Mike Gilmour (Chair), Dr Helen Garnett and Mr Ian Sampson as at 30 June 2016. The Committee met four time during the financial year ending 30 June 2016.

Under the Committee's Charter, the chief executive, executive manager Planning and Resources and other members of the management team and representatives of the Company's auditors attend by invitation.

Research Funding Panel

The Research Funding Panel (RFP) has formal terms of reference approved by the Board as detailed in its Charter. The key functions and accountabilities of the RFP and which are set out in its Charter are as follows:

- To conduct a contestable research grants process to identify project applications for support from Company contestable research funding;
- To develop and promulgate processes for selection of a portfolio of projects, from applications from internal and external providers, on merit against the strategic plan, and Industry and national priorities and through a robust, transparent system timed to optimise research performance and to meet reporting requirements;
- To work with the Board to ensure separation of Company research staff and SRA RFU staff responsible for the contestable research funding process, including monitoring and evaluation management, so that internally and externally provided projects are selected and managed objectively and without bias; and
- To work with the Board to ensure systems for efficient contracting and research program and R&D project monitoring and to develop and establish a project performance evaluation system to meet Industry, government and Council of Rural RDC expectations.

During the reporting period and as at 30 June 2016, the RFP consisted of Mr John Pollock (Chair), Mr Gary Longden, Dr Jeremy Burdon, Dr Andrew Wood and Dr Ian Johnsson (SRA Board director). The Committee met four times during the financial year ending 30 June 2016.

The manager of the RFU and other members of the RFU attend by invitation.

Remuneration and Appointments Committee

The Remuneration and Appointments Committee has formal terms of reference approved by the Board as detailed in its Charter. The key functions and accountabilities of the Committee and which are set out in its Charter are as follows:

- To develop and review policies on remuneration for Directors and senior officers of the Company, including terms of contracts, retention and termination;
- To review remuneration agreements for senior officers of the Company;
- To conduct assessments of key senior officers in relation to the performance objectives of the Company, and advise the Board; and
- To assist the Board in ensuring that the Company complies with all regulatory and accounting requirements for disclosure of remuneration.

The Committee is comprised of Mr Steve Guazzo (Chair) and Dr Helen Garnett as at 30 June 2016. The committee met once during the financial year ending 30 June 2016.

Director Selection Committee

The Director Selection Committee has formal terms of reference approved by the Board as detailed in its Charter. The key functions and accountabilities of the Committee and which are set out in its Charter are as follows:

- To identify and nominate the number of persons needed for election to the Board as Directors of the Company;
- To ensure a field of candidates and to choose from the available candidates for nomination those persons who will in its view best ensure the Board collectively has an appropriate balance of skills and experience in the areas identified under the Constitution;
- If the Chair is a retiring Director, to identify and nominate a person with appropriate skills for election to be Chair of the Company; and
- Each Director Selection Committee may take any action it thinks appropriate to advertise vacancies and using a transparent search process, to identify persons suitable for election or re-election to the office of Director.

The Constitution and the Committee Charter set out the requirements for the proceedings of the Committee and the qualifications, skills and experience necessary for the Board and which the Committee must consider. The Board Composition matrix is available to view of SRA's website at www.sugarresearch.com.au.

During the reporting period, the Committee is comprised of Ms Kathryn Adams (Chair), Mr Paul Schembri (Group G member representative), Mr Allan Dingle (Group G member representative), Mr John Pratt (Group M member representative), and Mr Peter Gill (Group M member representative).

Reporting and accountability

SRA communicated regularly with its key stakeholders throughout the reporting period.

As noted above, SRA entered into a Statutory Funding Agreement 2013-2017 (dated 5 August 2013) with the Commonwealth of Australia acting through the Department of Agriculture and Water Resources (as it is now termed).

Under the Statutory Funding Agreement, a reporting framework is set out under which SRA must report to the Commonwealth. Key reporting obligations include:

- Strategic Plan;
- Annual Operational Plan;
- Risk Management Plan;
- Fraud Control Plan;
- Intellectual Property Management Plan; and
- Asset Management Plan.

After each financial year, the Company must provide the Commonwealth with a compliance audit report and a certification report in respect of compliance with the *Sugar Research and Development Act 2013* (Cth).

Risk management

SRA's risk management policies and assessments are set out in its Risk Management Plan which outlines the process followed to identify risks and categories of risks (e.g. strategic, operational). Individual risks have been identified, assessed, categorised and entered on a risk register, which forms part of the plan.

The Board has delegated to the Audit and Risk Committee the responsibility to monitor and review risks via reports from management. A management risk committee meets regularly to consider the list of risks and identifies new risks for consideration by the Audit and Risk Committee. The Board has delegated to the Audit and Risk Committee the responsibility to monitor and review risks via reports from management. A management risk committee meets regularly to consider the list of risks and identifies new risks for consideration by the Audit and Risk Committee.

Insurance

SRA maintains an insurance program that provides cover for identified, insurable risks. The Constitution provides for an indemnity by the Company to each of the directors and other officers of the Company for potential losses incurred as a result of a claim by reason of an act committed by them in their capacity as director or office holder, unless the liability arises from conduct involving a lack of good faith.

During the reporting period, the Company paid an insurance premium in respect of an insurance policy for the benefit of directors, company secretary and other officers of the Company and an additional premium in respect of professional indemnity insurance. The directors' and officers' liability insurance policy grants indemnification in respect of certain liabilities for which the *Corporations Act 2001* (Cth) allows indemnification.

In accordance with normal commercial practice and under the terms of the insurance policies, the nature of the liabilities insured against and the amount of premiums paid remained confidential.

Statutory reports:

Directors' Report for the year ended 30 June 2016

The Directors of Sugar Research Australia Limited ABN 16 163 670 068 ("**Company**" or "**SRA**") submit their report for the year ended 30 June 2016 ("**reporting period**") as follows:

Company limited by guarantee

The Company was incorporated on 8 May 2013 and is a public company limited by guarantee. The Company has Group G Members and Group M Members (together the **'members'**). The Constitution states that, if the Company is wound up, the liability of each member is limited as follows:

(a) each member at the time the winding up starts; and

(b) each person who, at any time in the 12 months before the winding up started, was a member;

undertakes to contribute to the assets of the Company up to an amount not exceeding $2 for payment of the debts and liabilities of the Company, including the costs of winding up.

As at 30 June 2016, there were 8 Group M Members and 2,390 Group G Members. The total amount the members of the Company are liable to contribute if the Company is wound up for 2015/16 is $4,796.

On any winding up of the Company, any surplus property must not be paid to members but must be paid or transferred to another corporation, fund, authority or institution with:

(a) objects similar to the Company's objects; and

(b) a constitution which prohibits the distribution of its income and property among its members.

Objectives

The primary long-term objective of SRA is to invest in, facilitate and deliver innovative technology and best practices that enhance the Australian sugar industry's viability, competitiveness and sustainability.

In support of this objective, SRA is focused over the short to medium-term on:

- Targeting research and adoption efforts (**RD&E**) on critical industry issues and activities that will deliver positive impacts for SRA investors;
- Strengthening SRA's linkages and collaboration with other rural research and development corporations and research providers, both in Australia and internationally;
- Leveraging partnerships with industry service providers, government agencies and the private sector; and
- Establishing a performance and investor-centric culture within SRA.

Strategy for achieving objectives

To deliver on these strategic objectives, SRA has established eight key focus areas ("**KFAs**") – each with a suite of objectives, outputs, expected outcomes and measures by which to demonstrate success. These KFAs are intended to provide focus for SRA's research, development and adoption activities to address the primary productivity, profitability and sustainability challenges and opportunities facing industry, over the short-, medium- and long-term horizons.

The KFAs are:

1. Optimally-adapted varieties, plant breeding and release;
2. Soil health and nutrient management;
3. Pest, disease and weed management;
4. Farming systems and production management;
5. Milling efficiency and technology;
6. Product diversification and value addition;
7. Knowledge and technology transfer and adoption; and
8. Capability development, attraction and retention.

In addition to the KFAs, SRA has identified the following four high-priority "*Impact Areas*" that are to be addressed in the short- to medium-term through increased investment and activity:

1. Yellow Canopy Syndrome ("**YCS**") – identifying causal factor/s and management strategies for YCS;
2. Plant breeding – enhancing plant breeding (both conventional and genetically-modified ("**GM**"));
3. Adoption – improving industry extension and adoption pathways and initiatives; and
4. Harvesting efficiency – maximising productivity along the value chain through adoption of harvesting best practice.

The complete strategy for delivery on these objectives is detailed in SRA's 2013/14 – 2017/18 Strategic Plan ("**Strategic Plan**") which is available on SRA's website at http://www.sugarresearch.com.au/page/About_SRA/Corporate_publications/.

Principal activities during the reporting period

TThe Company's principal activities during the reporting period consisted of research, development and extension activities to contribute to the development of the Australian sugar industry. As detailed in the Constitution, the Company receives, amongst other funding, funds from the Commonwealth of Australia by way of proceeds from the sugarcane levy payable by sugarcane growers and millers under the *Primary Industries (Excise) Levies Act 1999* (Cth).

Through utilisation of the sugarcane levy (and funding from other sources) the Company carries out, co-ordinates and invests in research and development activities so as to facilitate dissemination, extension, adoption and commercialisation of results of research and development activities in relation to the Australian sugar industry.

Financial result

The profit for the reporting period is $6,224 thousand (2015: $6,342 thousand), including:

- $5,068 thousand (2015: $5,141 thousand) from operating activities; and
- $1,156 thousand (2015: $1,201 thousand) of interest income.

Performance measurement

SRA operates through an annual cycle of planning and accountability at all levels in the organisation. The cycle includes interlocking processes of strategic and operational planning, budgeting, implementation, evaluation, performance review and accountability to our members, levy payers and government investors.

SRA measures its performance against the Key Performance Indicators ("**KPIs**") in its Strategic Plan and Annual Operational Plan, as well as taking into account:

- the meeting of project milestones;
- the performance of SRA in meeting its obligations under the Statutory Funding Agreement 2013-2017 with the Commonwealth Government ("**SFA**"); and
- investor satisfaction and feedback.

The primary monitoring and reporting mechanisms include:

- Regular traffic light reporting to the SRA Board on output delivery and achievement against KPIs;
- Six-monthly exception reporting to the SRA Board on progress against the Strategic Plan; and
- Annual Performance Report published to demonstrate the performance of SRA's research, development and adoption activities and the return on investment provided to SRA's industry and government investors.

The Audit and Risk Committee also review, on an ongoing basis, a suite of reports that cover SRA's operational and strategic performance. These include: SRA operational reports, such as Finance, Workplace Health and Safety and Risk Management; and Research Funding Unit ("**RFU**") reports on the investment project portfolio. Where required, the Audit and Risk Committee provides the SRA Board with recommendations for remedial action to be taken to ensure SRA's operational and strategic performance remains on-track.

SRA also regularly communicates with its investors and other stakeholders on the Company's strategic and operational performance and use feedback on its performance to continually improve the quality of its research and investment processes, programs and activities.

As prescribed under both SRA's Constitution and the SFA, SRA is required to engage an independent organisation to undertake a comprehensive review of performance since SRA's establishment in 2013 ("**Independent Performance Review**"). This Independent Performance Review commenced in late 2015/16 and is focused on reviewing SRA's performance against the provisions of the SFA and the extent to which the company is delivering benefits to its investors.

The review includes consideration of SRA's role as both a research funder and research provider and an assessment of SRA's corporate governance; operations; planning, monitoring, evaluation and reporting; and interaction with investors and broader stakeholders.

The review will be completed in late 2016 with the review findings and recommendations being published in a report. SRA will shortly thereafter publish the SRA Board's response to the review findings and an implementation plan to address the recommendations in the report. Both the report and SRA's response will also be presented to a meeting of SRA's Delegates.

Directors

The names and particulars and the qualifications and experience of the Directors of the Company in office during the reporting period and until the date of this report are as follows. Directors and officers were in office for this entire period unless otherwise stated.

Director	Experience, special responsibilities and independence status
Dr Ron Swindells *FIE Aust, FAICD B.E. (Chem) (Hons), PhD*	Chairman *(appointed 29 October 2015)* Dr Swindells has been a Director of Sugar Research Limited and served as its Chairman between 1993–2003. He has also been a Director for Mackay Refined Sugars and the Australian Sugar Milling Council as well as an alternate Director of Sugar Australia Ltd and the New Zealand Sugar Company. Dr Swindells has operated at the senior management level in a number of companies including: • Chief Executive Officer of Mackay Sugar for 10 years • Bundaberg Sugar Company as Manager of Millaquin Mill and Bundaberg Refinery. More recently he has worked on a number of sugar-related consulting projects for various clients. Dr Swindells is currently serving a directorship with: • Pelala Pty Ltd. Member – Audit and Risk Committee *(resigned 16 December 2015).*
Dr Helen Garnett PSM *BSc (Hons), PhD, FTSE, FAICD*	Dr Garnett is an experienced company director and Chairman, with more than 20 years' experience as a director with listed and unlisted entities in the primary industry resource, energy health and education sectors, complemented by 15 years as a chief executive of entitites involved in research, technology development and transfer and education. She is a fellow of the Australian Institute of Company Directors and the Australian Academy of Technological Sciences and Engineering. Dr Garnett was previously the Chair of the Australian Biosecurity Intelligence Network and a director of the Grape and Wine Development Corporation. Dr Garnett is currently: • Chair, Delta Electricity • Chair, Australian Centre for Plant Functional Genomics • Director, Carbon Energy (and Chair – Audit and Risk Committee) • Director, Grains Research and Development Corporation • Director, National Centre for Vocational Educational Research • Director, Crawford Fund • Director, ABM Resources Limited (and Chair – Audit and Risk Committee) *(resigned 10 March 2016).* Member – Audit and Risk Committee. Member – Remuneration and Appointments Committee.
Mr Mike Gilmour *Dip Acctg, MBA, GradDipACG, FCPA, FAICD, FGIA* *JP (Qual)*	Mr Gilmour is an experienced company director with a strong commitment to corporate governance. He is also an experienced chief financial officer and senior executive manager, with experience in the professional services, health and manufacturing sectors. Mr Gilmour currently consults to listed and unlisted companies and organisations on financial and business re-engineering, risk management, governance and strategic planning. Through his schooling years and early work career, Mr Gilmour lived in the wheat and sheep growing district in the Mid-North of South Australia. Mr Gilmour recently stepped down from the role of Chair of the Metro North Brisbane Medicare Local, and as Chair of the Brisbane Metropolitan Region TAFE. He is a former President of the Queensland Division of CPA Australia and currently holds these directorships: • Independent Director of Isis Central Sugar Mill Ltd • Chair of Open Minds • Director of Aviation Australia Pty Ltd • Metro North Hospital and Health Board. Chairman – Audit and Risk Committee.

Director	Experience, special responsibilities and independence status
Mr Steve Guazzo	Mr Guazzo has extensive sugar industry experience as a sugarcane grower and harvesting contractor. He has also filled a range of industry representative positions for over 35 years. Mr Guazzo served as a Director of Sugar Terminals Limited for nine years and is a member of the Australian Institute of Company Directors. Mr Guazzo served as a director of Sugar Research Development Corporation. Mr Guazzo served directorships with: • Queensland Canegrowers Organisation Limited (Vice-Chairman) • CANEGROWERS Queensland Policy Council (Vice-Chair) • CANEGROWERS Herbert River (Chair). Chairman – Remuneration and Appointments Committee.
Dr Ian Johnsson *B. Rural Science (Hons I), PhD GAICD*	Dr Johnsson has worked extensively for national rural industries in the not-for-profit R&D corporation environment and reported to Rural R&D Corporation Boards since 1987. Dr Johnsson was the General Manager for Livestock Production Innovation with Meat & Livestock Australia until 2011 and continues to consult in rural RD&E strategy development and program evaluation. As the acting Managing Director of the Pig R&D Corporation, Dr Johnsson managed the wind-down and transition of research management staff into a new industry-owned company, Australian Pork Ltd. In this new organisation he served as the General Manager for Research & Innovation from 2001–2006. Dr Johnsson was a member of the Board of the Australian Biosecurity Cooperative Research Centre from 2004–2006 and has been a member of the Australian Institute of Company Directors since 2002. Dr Johnsson is currently serving directorships with the CRC for Sheep Industry Innovation, and the Australian Innovation Company; is the Principal and Director of his own consulting company and is a member of the ACT NRM Council. Member – Research Funding Panel
Dr Guy Roth *B Rural Science (Hons), Masters Applied Science (natural resource management), PhD (crop agronomy and soil science)*	*Appointed – 29 October 2015* Dr Guy Roth has extensive experience as a director, executive, and leader in agricultural research, development, and consulting. He has particular expertise in services related to irrigation, water, soil and natural resource management for agriculture and rural communities. Dr Roth is the Principal and Director of his own agribusiness consultancy, providing strategic leadership services across a range of functions. Dr Roth is a former National Manager and Research Director with the National Program for Sustainable Irrigation, was CEO of the Cotton Catchment Communities Cooperative Research Centre and was a Research Program Manager for the Cotton Research and Development Corporation (CRDC).
Mr Ian Sampson *B. Comm, LLB, FAICD, FAIM*	*Appointed – 29 October 2015* Mr Ian Sampson is an experienced non-executive Director and advisor for Boards and CEOs. He runs a successful business focussed in the areas of non-executive Board work. Mr Sampson has more than 25 years' experience as an executive and non-executive director of a range of companies and organisations in the private and not-for-profit sectors. Mr Sampson has been a senior executive in steel manufacturing, mining, sugar production and professional services businesses. He has been an active leader and member of teams running organisations. He has had functional responsibility for managing people, stakeholder relations, safety and risk management, quality development, organisational culture and sustainability. He is a former Director of the Sugar Research and Development Corporation. Mr Sampson is currently serving directorships with: • Peoplecare Health Insurance Ltd • The Leadership Foundation Pty Ltd (Chairman) • 139 Club (Chairman) • Yungaburra Pty Ltd Member – Audit and Risk Committee *(appointed 16 December 2015)*.

Director	Experience, special responsibilities and independence status
Mr Paul Wright AM	*Chairman (1 July 2015 – 29 October 2015)* *Resigned 29 October 2015* Mr Wright served as Chairman of BSES Limited from 2006 to 2013 and has held senior management and leadership roles in the banking, health, hospitality and consulting industries. In 2006, Paul was appointed a Member of the Order of Australia for his service to medical administration and to business and commerce. During a working career spanning over 45 years, including 30 years as a company director, he was: • General Manager for Queensland and the Northern Territory of the Medical Benefits Fund of Australia Limited • General Manager of The Brisbane Club • Chairman of The Australian Institute of Management • Chairman of The Royal Flying Doctor Service • Chairman of The Queensland Institute of Medical Research (QIMR) Trust • Deputy Chairman of the QIMR Council Mr Wright is currently serving directorships with: • Australian Sugar Industry Alliance Limited • Phoenix Eagle Company Pty Ltd (Chair) • Janette McArthur Pty Ltd • Idec Solutions Pty Ltd
Mr John Pollock *MAgSc, BAgSc, Dip Ag*	*Director (1 July 2015 – 9 July 2015)* *Resigned 9 July 2015* Mr Pollock served as a Director of BSES Limited from 2006–2013 and has extensive expertise in research, natural resource management, primary industries and corporate management and currently serves as Chair of several government committees. Mr Pollock has had a connection with the sugar industry throughout his life as a cane grower, researcher, public policy officer and research manager and funder. He has also held roles as: • Executive Director of the Department of Primary Industries and Fisheries, • Deputy Commissioner for the Murray-Darling Basin Commission, • Board Member of the Queensland Fisheries Management Authority; • Director of the Sugar Research and Development Corporation; and • Director of Skyview Solutions Ltd. Mr Pollock is currently serving a directorship with: • Tablelands Futures Corporation Ltd.
Mr Michael Shannon *BA LLB (Hons), GradDipACG MAICD*	Company Secretary and Legal Counsel Mr Shannon is an experienced company secretary and lawyer specialising in corporate and commercial law having worked in private legal practices in Australia and the UK and has performed in-house company secretarial and legal roles at an ASX listed company and at a large Australian retail banking organisation. Mr Shannon specialises in corporations and commercial law, corporate governance, risk and compliance. He is a Solicitor of the Supreme Court of Queensland and a member of the Queensland Law Society and an Associate of the Governance Institute of Australia. As SRA's Company Secretary, Michael provides the company secretarial and corporate governance advice to the Chairman, the Board, the CEO and the executive management team. As SRA's Legal Counsel, Mr Shannon is responsible for providing legal advice on all commercial, contractual, intellectual property (IP), procurement and insurance matters and broader legal matters as required.

Insurance of officers

During the reporting period, the Company paid an insurance premium in respect of an insurance policy for the benefit of directors, company secretary and other officers of the Company and an additional premium in respect of professional indemnity insurance. The directors' and officers' liability insurance policy grants indemnification in respect of certain liabilities for which the *Corporations Act 2001* (Cth) allows indemnification.

In accordance with normal commercial practice and under the terms of the insurance policies, the nature of the liabilities insured against and the amount of premiums paid remain confidential.

Meetings of Directors

The number of Directors' meetings and Board committee meetings held during the reporting period and the number of meetings attended by each Director was as follows:

SRA Board and Committee meetings 1 July 2015 to 30 JUNE 2016*						
	Full Board			Board Committees		
	Scheduled	Meetings held between scheduled Board meetings	Total	Audit & Risk	Remuneration & Appointments	Research Funding Panel
Dr Ron Swindells	6** [6]	1 [1]	7 [7]	2** [2]	-	-
Dr Helen Garnett	6 [6]	1 [1]	7 [7]	3 [4]	1 [1]	-
Mr Mike Gilmour	6 [6]	1 [1]	7 [7]	4^^^ [4]	-	-
Mr Steve Guazzo	6 [6]	1 [1]	7 [7]	-	1^^^ [1]	-
Dr Ian Johnsson	6 [6]	1 [1]	7 [7]	-	-	4 [4]
Dr Guy Roth^	4 [4]	Nil	4 [4]	-	-	-
Mr Ian Sampson^	3 [4]	Nil	3 [4]	2[2]~~	-	-
Mr Paul Wright AM***	2 [2]	0 [1]	2 [3]	-	-	-
Mr John Pollock^^	0 [0]	1 [0]	1 [0]	-	-	-

Where a director did not attend all meetings of the Board or relevant committee, the number of meetings for which the director was eligible to attend is shown in brackets.

* *The Company established a Director Selection Committee which does not comprise any Directors and is comprised of an independent chairman and 2 representatives from Group M members and 2 representatives from Group G members. This Committee held 3 meetings during the reporting period.*

** *Appointed Chair – effective from 29 October 2015. Resigned as ARC member – effective from 16 December 2015.*

*** *Resigned as Chair and Director- effective as of 29 October 2015.*

^ *Appointed as Director – effective as of 29 October 2015.*

^^ *Resigned as Director - effective as of 9 July 2015.*

^^^ *Indicates Chair.*

~~ *Appointed as ARC member – effective from 16 December 2015.*

Company Secretary

Mr Michael Shannon was appointed Company Secretary on 13 January 2014 and continues in the role of Company Secretary as at the date of this report.

Statement of Corporate Governance

A statement of corporate governance is set out in the section of the *Annual Report 2015/16 entitled Corporate Governance* and these pages form part of this report.

Rounding

The Company is of a kind referred to in ASIC Corporations (Rounding in Financial/ Directors' Reports) Instrument 2016/191 and in accordance with that instrument, amounts in the financial report and director's report have been rounded off to the nearest thousand dollars, unless otherwise stated.

Registered office

50 Meiers Road
Indooroopilly
QLD 4068

Auditor's independence

The Auditors Independence Declaration in relation to the audit for the year ended 30 June 2016 as required under section 307C of the *Corporations Act 2001* (Cth) has been received by the Company and is included on page 60 and forms part of the Directors' report for the reporting period ended 30 June 2016.

This report is made in accordance with a resolution of the Board of Directors and is authorised for and on behalf of the Directors by:

Ron Swindells (Chairman)

Mike Gilmour (Director)

Financial statements

42 Statement of profit or loss and other comprehensive income

43 Statement of financial position

44 Statement of changes in equity

45 Statement of cash flows

46 Notes to the financial statements

46 01. Reporting entity

46 02. Basis of preparation

47 03. Significant accounting policies

53 04. Revenue from operating activities

53 05. Other revenue

54 06. Operating expenses

54 07. Operating leases

54 08. Cash and cash equivalents

55 09. Cash flow reconciliation

55 10. Trade and other receivables

55 11. Property, plant and equipment

56 12. Intangible assets

57 13. Trade and other payables

58 14. Employee benefits

58 15. Contingencies and commitments

58 16. Capital and reserves

58 17. Business combinations

58 18. Related parties

Statement of profit or loss and other comprehensive income

For the year ended 30 June 2016

in thousands of dollars	Notes	**2016**	**2015**
Revenue	*4*	41,113	38,154
Other revenue	*5*	358	308
		41,471	38,462
Employee benefits		17,160	15,868
Operating expenses	*6*	17,930	16,189
Depreciation and amortisation	*12,13*	1,313	1,264
		36,403	33,321
Results from operating activities		5,068	5,141
Finance Income		1,156	1,201
Profit for the period		6,224	6,342
Other comprehensive income		-	-
Total comprehensive income		6,224	6,342

The above statement of profit or loss and other comprehensive income should be read in conjunction with the accompanying notes.

Statement of financial position

As at 30 June 2016

in thousands of dollars	Notes	2016	2015
Assets			
Cash and cash equivalents	*8*	38,326	33,778
Trade and other receivables	*10*	5,751	5,484
Prepayments		304	518
Assets held for sale	*11*	612	-
Total current assets		44,993	39,780
Property, plant and equipment	*12*	24,172	22,758
Intangible assets	*13*	573	68
Total non current assets		24,745	22,826
Total assets		69,738	62,606
Liabilities			
Trade and other payables	*14*	2,295	1,636
Employee benefits		2,214	2,018
Total current liabilities		4,509	3,654
Employee benefits		564	511
Total non current liabilities		564	511
Total liabilities		5,073	4,165
Net assets		64,665	58,441
Equity			
Retained earnings		64,665	58,441
Total equity		64,665	58,441

The above statement of financial position should be read in conjunction with the accompanying notes.

Statement of changes in equity

For the year ended 30 June 2016

in thousands of dollars	2016	2015
Opening balance	58,441	52,099
Total comprehensive income		
Profit	6,224	6,342
Other comprehensive income	-	-
Total comprehensive income for the period	6,224	6,342
Closing balance	64,665	58,441

The above statement of changes in equity should be read in conjunction with the accompanying notes.

Statement of cash flows

For the year ended 30 June 2016

in thousands of dollars	Notes	**2016**	**2015**
Operating activities			
Receipts from Statutory Authority and industry		41,182	35,781
Payments to suppliers and employees		(33,963)	(32,001)
Net cash from operating activities	9	7,219	3,780
Investing activities			
Interest received		1,156	1,201
Payments to acquire property, plant and equipment	12	(3,390)	(1,589)
Proceeds from sale of property, plant and equipment		84	49
Payments to acquire intangibles and other long term assets	13	(521)	(12)
Net cash used in investing activities		(2,671)	(351)
Financing activities			
Net cash from financing activities		-	-
Net increase in cash and cash equivalents		4,548	3,429
Cash and cash equivalents at beginning of period		33,778	30,349
Cash and cash equivalents at end of period	8	38,326	33,778

The above statement of cash flows should be read in conjunction with the accompanying notes.

Notes to the financial statements

For the year ended 30 June 2016

1. Reporting entity

Sugar Research Australia Limited (the Company) is a not-for-profit company limited by guarantee, domiciled and incorporated in Australia.

The Company's registered office is at 50 Meiers Rd, Indooroopilly, Brisbane. The Company primarily invests in and manages a portfolio of research, development and extension (RD&E) projects that drive productivity, profitability and sustainability for the Australian sugarcane industry.

2. Basis of preparation

(a) Statement of compliance

These financial statements are Tier 2 general purpose financial statements which have been prepared in accordance with Australian Accounting Standards - Reduced Disclosure Requirements adopted by the Australian Accounting Standards Board and the Corporations Act (2001).

Tier 2 reporting, which comprises the same recognition and measurement requirements of Tier 1 (standard reporting) but with substantially reduced disclosure requirements, assists users by providing a clearer and less technical explanation of the results of the Company.

These financial statements were authorised for issue by the Board of Directors on 19 August 2016.

(b) Basis of Measurement

These financial statements have been prepared on the historical cost basis.

(c) Functional and presentation currency

These financial statements are presented in Australian dollars, which is the Company's functional currency.

The Company is of a kind referred to in ASIC Corporations (Rounding in Financial/Directors' Reports) instrument 2016/191 and in accordance with that instrument, amounts in the financial report and director's report have been rounded off to the nearest thousand dollars, unless otherwise stated.

(d) Use of judgements and estimates

The preparation of financial statements in conformity with Australian Accounting Standards – Reduced Disclosure Requirements requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

3. Significant accounting policies

The accounting policies set out below have been applied consistently for the period presented in these financial statements.

(a) Determination of fair values

A number of the Company's accounting policies and disclosures require the determination of fair value, for both financial and non-financial assets and liabilities. When applicable, further information about the assumptions made in determining fair values is disclosed in the notes specific to that asset or liability.

(b) Foreign currency transactions

Transactions in foreign currencies are translated to the functional currency of the Company at exchange rates at the dates of the transactions.

(c) Revenue

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the entity and the revenue can be reliably measured.

(d) Employee benefits

(i) Defined contribution plans

A defined contribution plan is a post-employment benefit plan under which an entity pays fixed contributions into a separate entity and has no legal or constructive obligation to pay further amounts for example, a superannuation plan. Obligations for contributions to defined contribution plans are recognised as an employee benefit expense in the profit or loss in the periods during which related services are rendered by employees. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in future payments is available.

(ii) Short-term employee benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognised for the amount expected to be paid under short-term cash bonus if the Company has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

(iii) Other long-term employee benefits

The Company's net obligation in respect of long-term employee benefits is the amount of future benefit that employees have earned in return for their service in the current and prior periods. That benefit is discounted to determine its present value. The discount rate is the yield at the current reporting date on corporate bonds that have maturity dates approximating the terms of the Company's obligations.

(iv) Termination benefits

Termination benefits are expensed at the earlier of when the Company can no longer withdraw the offer of those benefits and when the Company recognises costs for a restructuring. If benefits are not expected to be settled wholly within 12 months of the end of the reporting period, then they are discounted.

3. Significant accounting policies (continued)

(e) Income Tax

The Company is exempt from income tax under Division 50 of the Income Tax Assessment Act 1997, as amended. Under this division the Company is considered to be classified as an entity established for the purpose of promoting the development of various Australian resources, including agricultural resources and not carried on for the profit or gain of its individual members.

(f) Cash and cash equivalents

Cash and cash equivalents comprise cash balances and call deposits with original maturities three months or less from the acquisition date that are subject to an insignificant risk of change in fair value, and are used by the Company in the management of its short-term commitments.

(g) Financial instruments

(i) Non-derivative financial assets

The Company initially recognises loans and receivables on the date that they are originated. All other financial assets are recognised initially on the trade date, which is the date that the Company becomes a party to the contractual provisions of the instrument.

The Company derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. Any interest in such transferred financial assets that is created or retained by the Company is recognised as a separate asset or liability.

Financial assets and liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Company has a legal right to offset the amounts and intends either to settle them on a net basis or to realise the asset and settle the liability simultaneously.

The Company classifies non-derivative financial assets into the category of “loans and receivables”.

Loans and receivables
Loans and receivables are financial assets with fixed or determinable payments that are not quoted in an active market but excludes cash equivalents. Such assets are recognised initially at the transaction price. Subsequent to initial recognition, loans and receivables are measured at amortised cost using the effective interest method, less any impairment losses see Note 3(j)(i).

Loans and receivables comprise trade and other receivables.

(ii) Non-derivative financial liabilities

The Company initially recognises all financial liabilities on the trade date at which the Company becomes a party to the contractual provisions of the instrument.

The Company derecognises a financial liability when its contractual obligations are discharged, cancelled or expire.

The Company classifies non-derivative financial liabilities into the other financial liabilities category. Such financial liabilities are recognised initially at fair value less any directly attributable transaction costs. Subsequent to initial recognition, these financial liabilities are measured at amortised cost using the effective interest rate method.

Other financial liabilities comprise trade and other payables.

3. Significant accounting policies (continued)

(h) Property, plant and equipment

(i) Recognition and measurement

Items of property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment losses.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the following:

- the cost of materials,
- any other costs directly attributable to bringing the assets to a working condition for their intended use,
- when the Company has an obligation to remove the assets or restore the site, an estimate of the costs of dismantling and removing the items and restoring the site on which they are located.

Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Any gains and losses on disposal of an item of property, plant and equipment (calculated as the difference between the net proceeds from disposal and the carrying amount of the item) is recognised in the profit or loss.

(ii) Subsequent costs

Subsequent expenditure is capitalised only when it is probable that the future economic benefits associated with the expenditure will flow to the Company. Ongoing repairs and maintenance are expensed as incurred.

(iii) Depreciation

Items of property, plant and equipment are depreciated from the date that they are installed and are ready for use, or in respect of internally constructed assets, from the date that the asset is completed and ready for use.

Depreciation is calculated to write off the cost of property, plant and equipment less their estimated residual values using the straight-line basis over their estimated useful lives. Depreciation is generally recognised in the profit or loss, unless the amount is included in the carrying amount of another asset. Land is not depreciated.

The estimated useful lives for the current year of significant items of property, plant and equipment are as follows:

	2016	2015
• buildings	5 - 40 years	5 - 40 years
• plant and equipment	3 - 40 years	3 - 40 years
• fixtures and fittings	2 - 15 years	2 - 15 years

Depreciation methods, useful lives and residual values are reviewed at each financial year-end and adjusted if appropriate.

3. Significant accounting policies (continued)

(i) Intangible assets

(i) Research and development

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognised in the profit or loss as incurred.

Development activities involve a plan or design for the production of new or substantially improved products and processes. Development expenditure is capitalised only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Company intends to, and has sufficient resources to, complete development and to use or sell the asset. The expenditure capitalised includes the cost of materials, direct labour and overhead costs that are directly attributable to preparing the asset for its intended use, and capitalised borrowing costs. Other development expenditure is recognised in the profit or loss as incurred.

Capitalised development expenditure is measured at cost less accumulated amortisation and any accumulated impairment losses.

(ii) Subsequent expenditure

Subsequent expenditure is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure, including expenditure on internally generated goodwill and brands, is recognised in the profit or loss as incurred.

(iii) Amortisation

Intangible assets, less amount impaired, are amortised on a straight-line basis in the profit or loss over their estimated useful lives, from the date that they are available for use.

The estimated useful lives for the current year are as follows:

	2016	2015
• Software	2 - 10 years	2 - 10 years

Amortisation methods, useful lives and residual values are reviewed at each financial year-end and adjusted if appropriate.

(j) Impairment

(i) Non-derivative financial assets

A financial asset not classified at fair value through the profit or loss is assessed at each reporting date to determine whether there is objective evidence that it is impaired. A financial asset is impaired if there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset, and that the loss event(s) had a negative effect on the estimated future cash flows of that asset that can be estimated reliably.

Objective evidence that financial assets are impaired includes default or delinquency by a debtor, restructuring of an amount due to the Company on terms that the Company would not consider otherwise, indications that a debtor or issuer will enter bankruptcy, adverse changes in the payment status of borrowers or issuers, economic conditions that correlate with defaults or the lack of presence of an active market.

Financial assets measured at amortised cost
The Company considers evidence of impairment for financial assets measured at amortised cost (loans and receivables and held-to-maturity financial assets) at both a specific asset and collective level. All individually significant assets are assessed for specific impairment. Those found not to be specifically impaired are then collectively assessed for any impairment that has been incurred but not yet identified. Assets that are not individually significant are collectively assessed for impairment by grouping together assets with similar risk characteristics.

3. Significant accounting policies (continued)

(j) Impairment (continued)

(i) Non-derivative financial assets (continued)

In assessing collective impairment the Company uses trends of the probability of default, timing of recoveries and the amount of loss incurred, adjusted for management's judgement as to whether current economic and credit conditions are such that the actual losses are likely to be greater or lesser than suggested by trend analysis.

(ii) Non-financial assets

The carrying amounts of the Company's non-financial assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. An impairment loss is recognised if the carrying amount of an asset cash-generating unit (CGU) exceeds its recoverable amount.

The recoverable amount of an asset or CGU unit is the greater of its value in use and its fair value less costs to sell. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or CGUs.

Impairment losses are recognised in the profit or loss. Impairment losses recognised in respect of CGUs are allocated to reduce the carrying amounts of assets in the CGU (or group of CGUs) on a pro rata basis.

An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

(k) Provisions

A provision is recognised if, as a result of a past event, the Company has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognised as a finance cost.

(l) Leases

(i) Lease assets

Assets held under operating leases are not recognised in the Company's statement of financial position.

(ii) Lease payments

Payments made under an operating lease are recognised in the profit or loss on a straight line basis over the term of the lease. Lease incentives received are recognised as an integral part of the total lease expense, over the term of the lease.

3. Significant accounting policies (continued)

(m) New standards and interpretations not yet adopted

A number of new standards, amendments to standards and interpretations are effective for annual periods beginning after 1 July 2015, and have not been applied in preparing these financial statements. Those which may be relevant to the Company are set out below. The Company does not plan to adopt these standards early.

- **AASB 9 Financial Instruments (2014)**

  AASB 9 replaces the existing guidance in AASB 139 *Financial Instruments: Recognition and Measurement*. AASB 9 includes revised guidance on the classification and measurement of financial instruments, a new expected credit loss model for calculating impairment on financial assets, and new general hedge accounting requirements. It also carries forward the guidance on recognition and de-recognition of financial instruments from AASB 139.

  AASB 9 is effective for annual periods beginning on or after 1 January 2018, with early adoption permitted.
  The Company is assessing the potential impact on its financial statements resulting from the application of AASB 9.

- **AASB 15 Revenue from Contracts with Customers**

  AASB 15 introduces a single revenue recognition model based on the transfer of goods and services and the consideration expected to be received for that transfer. Under AASB 15 an entity shall report useful information to users of financial statements about the nature, amount, timing and uncertainty of revenue and cash flows arising from a contract with a customer.

  AASB 15 is effective for annual periods beginning on or after 1 January 2018, with early adoption permitted. The extent of the impact has not yet been determined.

- **AASB 16 Leases**

  AASB 16 removes the classification of leases as either operating leases or finance leases – for the lessee – effectively treating all leases as finance leases. Short term leases (less than 12 months) and leases of low-value assets (such as personal computers) are exempt from the lease accounting requirements. There are also changes in accounting over the life of the lease. In particular, companies will now recognise a front-loaded pattern of expense for most leases, even when they pay constant annual rentals.

  AASB 16 is effective for annual periods beginning on or after 1 January 2019. However, early adoption is permitted provided AASB 15 *Revenue from Contracts with Customers* is also adopted. The extent of the impact has not yet been determined.

(n) Assets held for sale

Non-current assets are classified as held-for-sale if it is highly probable that they will be recovered primarily through sale rather than through continuing use.

Such assets are generally measured at the lower of their carrying amount and fair value less costs to sell. Impairment losses on initial classification as held-for-sale and subsequent gains and losses on re-measurement recognised in profit or loss.

Once classified as held-for-sale, intangible assets and property, plant and equipment are no longer amortised or depreciated.

4. Revenue from operating activities

in thousands of dollars	2016	2015
Industry contribution (i)	24,333	22,679
Commonwealth matching contribution (i)	6,635	6,064
Queensland government income (iii)	4,732	4,501
Commonwealth government grant income (ii)	1,790	2,229
Collaboration income (iv)	3,056	2,092
Sale of cane	567	589
	41,113	38,154

(i) Industry contribution and Commonwealth matching contribution

A statutory funding agreement is in place between the Commonwealth Government of Australia (Commonwealth) and Sugar Research Australia Limited. This agreement establishes terms on which the Commonwealth remits industry contributions toward research and development to the Company. The agreement also establishes the terms for Commonwealth matching contributions. Commonwealth matching contribution matches industry contribution dollar for dollar to a maximum level of 0.5% of the gross annual value of production of the sugar industry, provided conditions of the agreement are met.

(ii) Commonwealth government grant income

The Company has entered into Commonwealth Grant Agreements to fund collaborative research and development projects to support continued innovation in Australia's primary industries. The grants are provided as part of the Commonwealth government Rural R&D for Profit programme. The grants are paid in instalments by the Commonwealth upon completion of agreed milestones to the reasonable satisfaction of the Commonwealth, and compliance by the Company with its obligations under the grant. As at the reporting date, there are no unfulfilled conditions.

(iii) Queensland government income

The company entered into grant deed agreements with Queensland government to carry out research and development project activity that aligns to objectives of the Department of Agriculture and Fisheries Strategic Plan.

The Queensland government income is $4,732 thousand (30 June 2015: $4,501 thousand), including:

- $4,150 thousand (30 June 2015: $4,132 thousand) relating to Queensland Department of Agriculture and Fisheries grant deeds; and
- $582 thousand (30 June 2015: $369 thousand) from other Queensland government income.

As at the reporting date, there are no unfulfilled conditions.

(iv) Collaborative income

Collaboration income is contribution received from third parties where the Company is collaborating with them to achieve project objectives.

5. Other revenue

in thousands of dollars	2016	2015
Lease and rental income	164	163
Sundry income	177	153
Profit (loss) on sale of asset	17	(8)
	358	308

6. Operating expenses

in thousands of dollars	2016	2015
External research providers	7,031	6,024
Asset and property management	3,114	2,963
Professional and consulting	2,597	2,553
Research consumables	1,061	1,028
Industry consultation	640	634
Registration, subscriptions and licences	572	456
Telecommunications	453	440
Other operating costs	2,462	2,091
	17,930	16,189

7. Operating leases

At the end of the reporting period, the future minimum lease payments under non-cancellable operating lease are payable as follows.

in thousands of dollars	2016	2015
Less than one year	481	432
Between one and five years	336	558
More than five years	-	-
	817	990

During the year ended 30 June 2016, $612 thousand (30 June 2015: $648 thousand) was recognised as an expense in the profit and loss in respect of cancellable and non-cancellable operating leases.

8. Cash and cash equivalents

Cash and cash equivalents consist of cash on hand and balances with banks, and investments in on call term deposits. Cash and cash equivalents included in the statement of cash flows comprise the following amounts in the statement of financial position:

in thousands of dollars	2016	2015
Bank balances	6,912	5,676
Call deposits	31,414	28,102
Cash and cash equivalents	38,326	33,778
Cash and cash equivalents in the statement of cash flows	38,326	33,778

Cash and cash equivalents are held with bank and financial institution counterparties, which are rated AA or better, based on rating agency Standard and Poor's ratings.

9. Cash flow reconciliation

in thousands of dollars	2016	2015
Profit for the period	6,224	6,342
Adjustments for:		
Depreciation and amortisation	1,313	1,264
Interest received	(1,156)	(1,201)
(Profit)/loss from sale of property, plant and equipment	(17)	8
Change in working capital and provisions:		
Increase in trade and other receivables, and prepayments	(53)	(3,139)
Increase in payables	659	442
Increase in provisions for employee benefits	249	64
Net cash used from operating activities	7,219	3,780

10. Trade and other receivables

in thousands of dollars	2016	2015
Accrued income	2,035	1,431
Other trade receivables	3,716	4,053
	5,751	5,484
Current	5,751	5,484
Non-current	-	-
	5,751	5,484

11. Assets held for sale

During the year ended 30 June 2016, the company decided to sell a portion of the land and all facilities owned in the Bundaberg region. Efforts have commenced to sell these assets and a sale is expected in the following year.

At 30 June 2016, the assets held for sale comprised of the following:

in thousands of dollars	*Note*	2016	2015
Property, plant and equipment			
Cost	*12*	627	-
Accumulated Depreciation	*12*	(15)	-
		612	-

There are no liabilities attached to these assets.

12. Property, plant and equipment

in thousands of dollars	*Note*	Land and buildings	Plant and equipment	Office equipment	Total
Cost					
Balance at 1 July 2015		18,027	6,522	678	25,227
Additions		1,563	1,773	54	3,390
Reclassification to assets held for sale	*11*	(627)	-	-	(627)
Disposals		-	(118)	-	(118)
Balance at 30 June 2016		18,963	8,177	732	27,872
Accumulated depreciation and impairment losses					
Balance at 1 July 2015		(547)	(1,614)	(308)	(2,469)
Depreciation for the period		(298)	(864)	(135)	(1,297)
Reclassification to assets held for sale	*11*	15	-	-	15
Disposals		-	51	-	51
Balance at 30 June 2016		(830)	(2,427)	(443)	(3,700)
Carrying amounts					
at 1 July 2015		17,480	4,908	370	22,758
at 30 June 2016		18,133	5,750	289	24,172

in thousands of dollars	Land and buildings	Plant and equipment	Office equipment	Total
Cost				
Balance at 1 July 2014	17,910	5,190	610	23,710
Additions	117	1,403	69	1,589
Disposals	-	(71)	(1)	(72)
Balance at 30 June 2015	18,027	6,522	678	25,227
Accumulated depreciation and impairment losses				
Balance at 1 July 2014	(260)	(848)	(160)	(1,268)
Depreciation for the period	(287)	(780)	(149)	(1,216)
Disposals	-	14	1	15
Balance at 30 June 2015	(547)	(1,614)	(308)	(2,469)
Carrying amounts				
at 1 July 2014	17,650	4,342	450	22,442
at 30 June 2015	17,480	4,908	370	22,758

13. Intangible assets

in thousands of dollars	Software	Intellectual Property	Total
Cost			
Balance at 1 July 2015	196	8,900	9,096
Additions	521	-	521
Balance at 30 June 2016	717	8,900	9,617
Accumulated amortisation and impairment losses			
Balance at 1 July 2015	(128)	(8,900)	(9,028)
Amortisation for the period	(16)	-	(16)
Impairment loss	-	-	-
Balance at 30 June 2016	(144)	(8,900)	(9,044)
Carrying amounts			
at 1 July 2015	68	-	68
at 30 June 2016	573	-	573

in thousands of dollars	Software	Intellectual Property	Total
Cost			
Balance at 1 July 2014	184	8,900	9,084
Additions	12	-	12
Balance at 30 June 2015	196	8,900	9,096
Accumulated amortisation and impairment losses			
Balance at 1 July 2014	(80)	(8,900)	(8,980)
Amortisation for the period	(48)	-	(48)
Impairment loss	-	-	-
Balance at 30 June 2015	(128)	(8,900)	(9,028)
Carrying amounts			
at 1 July 2014	104	-	104
at 30 June 2015	68	-	68

Impairment charge

In the year ended 30 June 2016, there was a no impairment charge.

Plant breeders' rights, with a fair value of $8,900 thousand were acquired on 2 August 2013 as part of a business combination involving the acquisition of most activities of BSES Limited by the Company.

The Company has assessed the recoverable amount of the plant breeders' rights (PBR) on 2 August 2013 to be nil. The PBRs were acquired as part of the business combination and transfer of assets from BSES limited. The main source of funding of the Company is the receipt of a Statutory Levy and as a result there are no cash flows from PBRs in the Company and an $8,900 thousand impairment loss was recognised in the statement of profit or loss and other comprehensive income in the period 8 May 2013 to 30 June 2014.

14. Trade and other payables

in thousands of dollars	2016	2015
Trade payables	2,163	1,359
Other payables and accrued expenses	132	277
	2,295	1,636
Current	2,295	1,636
Non-current	-	-
	2,295	1,636

15. Employee benefits

Defined contribution superannuation plans

The Company has paid contributions of $1,463 thousand (30 June 2015: $1,390 thousand) to defined contributions plans on behalf of employees for the reporting period.

16. Contingencies and commitments

The Company has outstanding milestone commitments of $17,285 thousand as at 30 June 2016. (2015: $22,073 thousand)

17. Capital and reserves

The Company is a company limited by guarantee, and as such, does not have share capital. The Company's capital consists of financial assets and retained earnings.

Membership is divided into grower members (group G) and miller members (group M).

At the reporting date there were 2,390 (2015: 2,357) group G members and 8 (2015: 8) group M members guaranteeing to contribute up to $2.00 each to the property of the Company in the event of it being wound up.

18. Related parties

(i) Key management personnel compensation

The key management personnel compensation was $2,196,348 (30 June 2015: $2,196,025) for the reporting period.

Directors' declaration

In the opinion of the directors of Sugar Research Australia Limited ('the Company'):

(a) the Company is not publicly accountable;

(b) the financial statements and notes that are set out on pages 10 to 26 are in accordance with the Corporations Act 2001, including:

  (i) giving a true and fair view of the Company's financial position as at 30 June 2016 and of its performance, for the financial year ended on that date; and

  (ii) complying with Australian Accounting Standards – Reduced Disclosure Requirements and the Corporations Regulations 2001; and

(c) there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

Signed in accordance with a resolution of the directors:

Dated at Brisbane day of 19 August 2016.

Ron Swindells

Director

Lead Auditor's Independence Declaration under Section 307C of the *Corporations Act 2001*

Lead Auditor's Independence Declaration under Section 307C of the Corporations Act 2001

To: the directors of Sugar Research Australia Limited

I declare that, to the best of my knowledge and belief, in relation to the audit for the financial year ended 30 June 2016 there have been:

(i) no contraventions of the auditor independence requirements as set out in the Corporations Act 2001 in relation to the audit; and

(ii) no contraventions of any applicable code of professional conduct in relation to the audit.

KPMG

M L Gray
Partner

Brisbane

15 August 2016

KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

Liability limited by a scheme approved under Professional Standards Legislation.

Independent Auditor's Report to the Members of Sugar Research Australia Limited

KPMG

Independent auditor's report to the members of Sugar Research Australia Limited

We have audited the accompanying financial report of Sugar Research Australia Limited (the Company), which comprises the statement of financial position as at 30 June 2016, and the statement of profit or loss and other comprehensive income, statement of changes in equity and statement of cash flows for the year ended on that date, notes 1 to 18 comprising a summary of significant accounting policies and other explanatory information, and the directors' declaration.

Directors' responsibility for the financial report

The directors of the company are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards – Reduced Disclosure Requirements and the *Corporations Act 2001* and for such internal control as the directors determine is necessary to enable the preparation of the financial report that is free from material misstatement, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express an opinion on the financial report based on our audit. We conducted our audit in accordance with Australian Auditing Standards. These Auditing Standards require that we comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance whether the financial report is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial report. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial report, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation of the financial report that gives a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the directors, as well as evaluating the overall presentation of the financial report.

We performed the procedures to assess whether in all material respects the financial report presents fairly, in accordance with the *Corporations Act 2001* and Australian Accounting Standards – Reduced Disclosure Requirements, a true and fair view which is consistent with our understanding of the Company's financial position and of its performance.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

KPMG, an Australian partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.

Liability limited by a scheme approved under Professional Standards Legislation.

Independence

In conducting our audit, we have complied with the independence requirements of the *Corporations Act 2001*. We confirm that the independence declaration required by the *Corporations Act 2001*, which has been given to the directors of Sugar Research Australia Limited on 15 August 2016, would be in the same terms if given to the directors as at the time of this auditor's report.

Auditor's opinion

In our opinion the financial report of Sugar Research Australia Limited is in accordance with the *Corporations Act 2001*, including:

(a) giving a true and fair view of the Company's financial position as at 30 June 2016 and of its performance for the year ended on that date; and

(b) complying with Australian Accounting Standards – Reduced Disclosure Requirements and the Corporations Regulations 2001.

KPMG

M L Gray
Partner

Brisbane

22 August 2016

Appendix A

Annual reporting compliance checklist

The following checklist shows SRA's compliance with key annual reporting requirements completed during the 2015/2016 financial year in accordance with the Company's Constitution, the *Corporations Act 2001* (Cth), the *Sugar Research and Development Services Act 2013* (Cth) and the Statutory Funding Agreement (SFA).

Annual reporting requirements	What SRA delivered 2015/2016 financial year
Annual Report requirements – SRA Constitution (rules 22.6, 24.3)	
The Board must include in the Annual Report for each financial year:	
• a report on the operations of the Committees specified in the Constitution during the year; and	*Annual Report 2015–16 pages 32-33* include a report on the operations of each Committee; and
• a report on the operations of the code of conduct during the year including how the Board dealt with material breaches (if any).	*Annual Report 2015–16 page 31* includes a report on the operations of the SRA Code of Conduct.
Annual reporting to members of a company limited by guarantee – *Corporations Act 2001* (Cth) (section 316A)	
A member of a company limited by guarantee may, by notice in writing to the company, elect to receive a hard copy or an electronic copy of the: • the financial report; and • the directors' report; and • the auditor's report.	*Annual Report 2015–16 pages 34-62* contains the financial report, directors' report and auditor's report.
The company must send a copy of the above listed reports, free of charge, to each member who has made an election for that financial year, in accordance with the election, by the earlier of: • 21 days before the next AGM after the end of the financial year; and • four (4) months after the end of the financial year.	Members have been advised in the Notice of Annual General Meeting dated on or about 20 September 2016 that they may, by notice in writing, elect to receive a hard copy or an electronic copy of the financial report, directors' report and auditor's report. An electronic copy was made available to the members via the SRA website: www.sugarresearch.com.au
Laying reports before AGM – *Corporations Act 2001* (Cth) (section 317)	
The directors of a public company must lay before the AGM: • the financial report; and • the directors' report; and • the auditor's report, for the last financial year that ended before the AGM.	*Annual Report 2015–16* to be presented to AGM scheduled for 20 October 2016.
Lodging Annual Report with ASIC – *Corporations Act 2001* (Cth) (section 319)	
A company must lodge the Annual Report with the Australian Securities and Investments Commission (ASIC) within four months after the end of the financial year.	*Annual Report 2015–16* to be sent to ASIC within four months after the end of the financial year.

Annual reporting requirements *(continued)*	What SRA delivered 2015/2016 financial year
Annual Report to include any direction from the Minister – *Sugar Research and Development Services Act 2013* (Cth) (section 11(4))	
The Industry Services Body must, within 14 days of lodging a financial report (the Annual Report), give the Minister for Agriculture, the Hon. Barnaby Joyce MP a copy of the report.	No written direction from the Deputy Prime Minister, the Hon. Barnaby Joyce MP, pursuant to section 11 of the *Sugar Research and Development Services Act 2013* (Cth) was given to SRA as Industry Services Body during the financial year.
The report must comply with section 295 of the *Corporations Act 2001* and section 11 of the *Sugar Research and Development Services Act 2013* (Cth).	
Provision of Annual Report to the Commonwealth – Statutory Funding Agreement (clauses 12.6, 12.7, 12.8 and 12.9)	
SRA to do certain things as follows: • must prepare an Annual Report complying with the *Corporations Act 2001* (Cth) and the requirements of the Statutory Funding Agreement; and • must provide four copies to the Commonwealth by 31 December 2016; and • the Annual Report to include a reasonably comprehensive coverage of matters listed in clauses 12.9(a)–(m) of the Statutory Funding Agreement.	*Annual Report 2015–16:* four copies to be provided to the Department of Agriculture (Cth) by 31 December 2016. *Annual Report 2015–16* addresses, where appropriate, matters listed in clauses 12.9(a)–(m) of the Statutory Funding Agreement.

Appendix B

List of Delegates per mill area/group

Mill area/Mill group	Processing Plant/Mill	Group G (Grower) Delegates	Group M (Miller) Delegates
Mossman	Mossman	Brett Coulthard	Peter Gill
Tableland	Tableland	*No nominations received*	Trevor Crook
Mulgrave	Mulgrave	Jeffrey Day	Trevor Crook
South Johnstone	South Johnstone	Joseph Marano	Trevor Crook
Tully	Tully	Thomas Harney	Barry Dun
Wilmar Mill Group (Herbert)	Victoria Macknade	Jeffrey Cantamessa Christopher Bosworth	Paul Britton Paul Britton
Wilmar Mill Group (Burdekin)	Invicta Pioneer Kalamia Inkerman	Cy Kovacich Arthur Woods Colin Ivory Laurence Dal Santo	Ian Davies Ian Davies Julian Venning Julian Venning
Proserpine	Proserpine	Anthony Large	Peter Larsen
MSL Mill Group (Central)	Farleigh Marian Racecourse	Joseph Borg Michael Deguara Bill MacDonald	Peter Gill Peter Gill Peter Gill
Plane Creek	Plane Creek	Malcolm Langdon	Peter Larsen
Bundaberg Sugar Mill Group (South)	Bingera Millaquin	Jay Hubert Kelvin Griffin	Gary Nixon Gary Nixon
Isis	Isis	Neil Kingston	John Gorringe
Maryborough	Maryborough	Allen Birt	Trevor Crook
Rocky Point	Rocky Point	Greg Zipf	David Heck
NSW Sugar Co-op Mill Group	Condong Broadwater Harwood	David Bartlett Wayne Rogers Ross Farlow	Chris Connors James Sneesby Ian Causley

Appendix C: 2013/14-2017/18 Strategic Plan Summary

Our vision	Delivering valued solutions for a growing Australian sugar industry			
Our purpose	Undertaking targeted research, development and adoption programs for the sugar industry			
Our key focus areas	**1. Optimally-adapted varieties, plant breeding and release**	**2. Soil health and nutrient management**	**3. Pest, disease and weed management**	**4. Farming systems and production management**
Our objectives	• World-class variety development. • Enhanced variety breeding, selection and release. • Collaborative, interdisciplinary and systems approach to RD&E.	• Understood and improved soil health issues. • Understood impacts of on-farm practices on water quality. • Improved methods and tools to enable, or improve, cane production on poor performing or marginal soils.	• Enhanced biosecurity capability. • Minimised economic and environmental impacts of pests, diseases and weeds through targeted research.	• Research leading to the optimal use of inputs on-farm. • Research on planting technologies, ratoonability, break-crop and fallow practices to optimise yields. • Practical application of the value chain model to enhance grower, harvester and miller interfaces and improved adoption of harvesting best-practices.
Our deliverables	• Locally-adapted cane varieties. • Enhanced collaboration with growers, millers and productivity services groups. • Increased regional trials and releases. • Earlier communication and dissemination of information, including variety selection tools. • Diagnostic and advisory services. • Research collaborations.	• Identification of soil health factors. This will include R&D covering crop nutrition; soil biology; soil fertility; regional soil factors; chemical utilisation; and reduction of soil pathogens and nematodes. • Practices to reduce chemical inputs and nutrient losses. • Review of Six Easy Steps ™. • Rapid soil screening technologies.	• Plant and molecular screening. • Integrated pest and weed management systems. • Pest and weed control strategies and technologies. • Herbicide-resistant cane varieties. • Alternative chemical treatments. • Updated management dossiers on key exotic threats.	• Precision-agriculture techniques and resources. • Best-practice information. • Improved planting technology and crop establishment. • Harvesting best-practice regional trials and demonstration.
Our measures of success	• 3 varieties which meet the above expectations released per 5-year period for each region. • Percent production from new varieties (<7 years since release). • Rate of genetic gain (tonnes of cane per hectare (TCH), commercial cane sugar (CCS), tonnes of sugar per hectare (TSH)). • Weighted average disease ratings for varieties in each region.	• Soil health indicators developed for sustainable sugarcane production. • Guidelines, mechanisms and/or varieties identified for increasing nutrient use-efficiency within plant and ratoon crops. • Guidelines and mechanisms developed for minimising chemical and nutrient losses and understanding water quality. • SIX EASY STEPS™ nutrient management program reviewed with improvements made where necessary. • Guidelines for implementation of PA developed.	• Industry supported through effective pest, disease and weed diagnostic capabilities and awareness and training programs. • Development and adoption of SRA-developed packages for integrated management of key pests, diseases and weeds. • Weighted average disease ratings for varieties in each region. • Up-to-date dossiers to support contingency plans to minimise threats and impacts of key exotics. • Capability to provide entomology, pathology and weed expertise to meet the pest, disease and weed diagnostic and management needs of the industry.	• Methodology for more rapid and efficient bulking of sugarcane varieties. • Adoption of a better sugarcane planting technology. • Improved crop performance over longer cropping cycles. • Better crop management under conditions of water stress (too much and too little). • Adoption of PA technology and techniques. • Adoption of harvesting best-practice.
Industry benefits	• Increased cane and sugar yields. • Climate tolerant varieties. • Pest and disease resistance. • Reduced inputs. • Improved ratoonability. • Increased regional trials and releases. • Faster varietal adoption.	• Improved soil health. • Reduced impact of off-farm run-off. • Improved production on marginal soils. • Improved reputation and relationship with community and environmental groups.	• Enhanced capacity to deal with incursions of exotic pests, diseases and weeds. • Minimised economic and environmental impacts.	• Adoption of agronomic and harvesting best-practices. • Optimised yields. • Optimised use of inputs. • Reduced operational costs.

Our values

Innovation	Through adaptability, creativity and goal orientation
Investor satisfaction	Through strategic alignment, active communication and commitment
Accountability	Through personal accountability, including health and safety, honesty, active communication and integrity
Teamwork	Through shared goals, cooperation and trust

Our key focus areas	5. Milling efficiency and technology	6. Product diversification and value addition	7. Knowledge and technology transfer and adoption	8. Capability development, attraction and retention
Our objectives	• Review of logistics management to reduce operational costs and improve mill capacity utilisation. • New or improved processes, technology and/or infrastructure to increase mill processing efficiency. • Possible solutions to address quality issues.	• Ongoing research to identify and/or develop alternative products or uses for sugarcane and determine the basic requirements for adoption. • Economic feasibility studies of identified industry by-products, their use and likely market viability.	• Coordinated extension that optimises innovation and adoption at the farm level and encourages research that meets the needs of the industry. • Inclusion of extension mechanisms in research proposals. • Enhanced communication and transfer tools to disseminate research findings to end-users and facilitate their uptake by growers and millers. • Assessment of the uptake of developed technologies and evaluate the effectiveness of technology transfer tools.	• Review of current and future RD&E skills and capacity needs for the sugarcane industry. • Development and retention of current industry participants, as well as attraction of new participants to the sugarcane industry. • Fostered collaboration for cross-industry and cross-sectoral skill development, innovation and networks.
Our deliverables	• Optimised milling processes and technology.	• Industry supply chain analysis. • Exploration of alternative processing options and products. • Feasibility analysis of alternative products.	• Translational research approach. • Collaborative extension. • Enhanced research and technology extension. • Multi-media extension.	• Industry RD&E skills and capability assessment. • Scholarship program. • Participative and collaborative partnerships. • Succession planning. • Performance management framework.
Our measures of success	• Adoption of improved or novel milling processes and technology.	• Sugar industry supply chain analysis completed. • Identification of new opportunities in product diversification and innovation.	• Joint planning of research translation and extension programs with other stakeholders. • Effective delivery of extension messages, as demonstrated through research uptake. • Increased awareness of technological innovations, locally and internationally. • Research outputs' key RD&E messages are promoted in a timely manner through various channels. • Increased support for and participation in SRA delivery networks, events and extension programs.	• Published results of industry RD&E skills and capability assessment and recommended strategies in National Sugarcane Industry RD&E Strategy. • SRA participation and investment in relevant collaborative and cross-sectoral RD&E programs. • Increased availability of skilled industry personnel. • SRA sponsored Young Industry Participants' Forum held annually. • Development and uptake of new and existing knowledge transfer or training programs or resources. • Scholarships awarded to current and future industry participants.
Industry benefits	• Improved mill capacity utilisation. • Improved mill processing efficiency. • Improved quality. • Optimised mill transport and logistics.	• Alternative products or uses for sugarcane. • Economic feasibility of industry by-products.	• Skilled advisory sector that drives the adoption of new technology and practices. • Improved collaboration and coordination of extension services. • Improved communication, knowledge transfer and adoption.	• Attraction and retention of industry participants. • Highly-skilled industry workforce. • Cross-industry and cross-sectoral collaboration. • Connected and respected.

Appendix D

Alignment of SRA's KFAs to Industry and Government Priorities

Stakeholder priorities	SRA Key Focus Areas							
	1. Optimally adapted varieties, plant breeding and release	2. Soil health and nutrient management	3. Pest, disease and weed management	4. Farming systems and production management	5. Milling efficiency and technology	6. Product diversification and value addition	7. Knowledge and technology transfer and adoption	8. Capability development, attraction and retention
Statement on Priorities for Research 2011-2014 – Key Issues for Research Action[1]								
1. Industry growth: need to stop decline and build to 36Mtpa, including by RD&E to increase yield and achieve step-change in productivity	■			■		■	■	■
2. Cost and profitability: of cane and sugar production, across different farm types and mills, including by RD&E on efficiency along the value chain		■	■	■	■	■	■	■
3. Environmental and regulatory pressures: including by RD&E into water, chemicals and technologies/systems to lift environmental sensitivity	■	■	■	■		■	■	■
4. Diversification: biomass, fuel and new products					■	■	■	■
National Science and Research Priorities[2]								
1. Food	■	■	■	■	■	■	■	■
2. Soil and water	■	■	■	■	■		■	■
3. Transport					■	■		■
4. Cybersecurity								
5. Energy						■		
6. Resources								
7. Advanced manufacturing	■	■		■	■	■	■	■
8. Environmental change	■	■	■	■	■		■	■
9. Health								

1 *Statement on Priorities for Research 2011-2014*, Australian Sugar Industry Alliance, 2011.

2 *National Science and Research Priorities*, Australian Government, 2015.

Stakeholder priorities	SRA Key Focus Areas							
	1. Optimally adapted varieties, plant breeding and release	2. Soil health and nutrient management	3. Pest, disease and weed management	4. Farming systems and production management	5. Milling efficiency and technology	6. Product diversification and value addition	7. Knowledge and technology transfer and adoption	8. Capability development, attraction and retention
***Rural RD&E Priorities*[3]**								
1. Advanced technology	■	■	■	■	■	■	■	■
2. Biosecurity	■		■	■				■
3. Soil, water, and managing natural resources	■	■		■	■		■	■
4. Adoption of R&D	■	■	■	■	■		■	
***Queensland's Food and Fibre Policy*[4]**								
1. Drive growth, efficiency and sustainability	■	■	■	■	■	■	■	■
2. Support a modern and skilled workforce				■			■	■
3. Advance research and development	■	■	■	■	■	■	■	■
4. Improve Queensland's biosecurity capability	■		■				■	■
5. Deliver service innovation							■	
***National Sugarcane Industry RD&E Strategy – Goals*[5]**								
1. A growth industry, successfully competing in the world market, through profitable businesses	■	■	■	■	■	■	■	■
2. Successful diversification into related sugarcane products, using world-class research and development					■	■	■	■
3. Global leaders in environmental sustainability	■	■	■	■	■	■	■	
4. Dynamic and cooperative industry leadership							■	■

3 *Rural RD&E Priorities*, Agricultural Competitiveness White Paper, Australian Government, 2015.

4 *Queensland's Food and Fibre Policy – Labor's Plan for Agriculture, Queensland Labor Party, 2015. The Queensland Government is currently developing a ten-year agriculture and food RD&E 'Blueprint' and supporting 'Roadmaps' which will augment the objectives in Food and Fibre – Labor's Plan for Agriculture.*

5 *National Sugarcane Industry RD&E Strategy*, 2010.

Sugar Research Australia Limited
ABN 16 163 670 068

Head Office
50 Meiers Road
Indooroopilly QLD 4068
Australia

Postal Address
PO Box 86
Indooroopilly QLD 4068
Australia

Tel 07 3331 3333
Fax 07 3871 0383
Email sra@sugarresearch.com.au
Web sugarresearch.com.au