Sugar Research Australia Limited (SRA) is a sugarcane grower and miller owned company and the declared Industry Services Body for the Australian sugarcane industry under the Sugar Research and Development Services Act 2013 (Cth).

As the declared Industry Services Body, SRA is required to provide and manage research, development and adoption (RD&A) activities for the benefit of the sugarcane industry and for the wider public good.

Research and development (R&D) innovation is critical for the sugarcane industry at this time where there is a need for productivity and profitability gains to keep ahead of escalating costs of production and competitive challenges, including sustained low world sugar prices, poor Australian dollar exchange rate, increasing global competition from low cost countries, trade policy and market access restrictions, and increasing competition for land use as well as the impact of climate variability and growing social licence to operate concerns.

With the industry facing increasing levels of disruption and change, there is a pressing need for SRA to deliver transformational innovation to underpin the Australian sugarcane industry’s competitiveness and long-term viability.

The Australian government is also calling upon agricultural Research and Development Corporations (RDCs), including SRA, to play an increasingly important role in driving Australia’s innovation agenda and delivering cost effective and valuable RD&A to levy payers. At the same time, SRA’s revenue is under pressure due to reducing levy income and government funding. SRA therefore needs to look to innovate the way it conducts its business, including the ability to position itself to more effectively partner and work across the agricultural innovation system and attract collaboration investment to fund R&D that addresses the innovation challenges of the sugarcane industry.

Whilst this Annual Operational Plan (AOP) for 2020/21 outlines the RD&A activities and investment programs SRA will be undertaking during 2020/21 to deliver on our current Strategic Plan 2017/18 – 2021/22, SRA recognises there is a need to re-assess our strategic and operational agenda in the context of the current challenges facing industry and SRA.

This AOP is therefore to be considered an Interim AOP.

SRA will be undertaking a comprehensive and multi-faceted review of its role, strategy, operating model, organisational design and asset base in the first quarter of 2020/21. As this AOP directly aligns with SRA’s current Strategic Plan it will need to be revised in late 2020 to account for the outcomes of the strategic review and any subsequent changes to SRA’s strategy, investor funder model and organisational structure.

Subject to the outcomes of the strategy review, SRA will invest $32.4M in more than 129 RD&A activities and programs during 2020/21 to meet the needs of our industry and government investors. Our contestable investment program will fund $8.5M across a wide range of activities and programs including but not limited to milling production, genetic analysis for sugarcane breeding, farming systems, soil health, harvesting, and Industry good initiatives, such as the sugarcane industry Life Cycle Analysis.

SRA will also invest $12.3M in core research critical to the future of the Australian sugarcane industry, including activities in plant breeding and biosecurity.

In delivering our RD&A portfolio and strategy review agenda, SRA will continue to engage and collaborate with its Members, levy payers, industry representative bodies, government, productivity services, extension providers, other industry stakeholders, researchers and international peers and partners. SRA will also expand collaborations and leverage investment with other RDCs to address critical cross-sectoral issues impacting agricultural industries and to identify leading-edge innovation and best-practices.

[Left] New Energy Farms (NEF) and SRA will start the process of working together to undertake research and development to introduce the NEF CEEDSTM (Crop Expansion Encapsulation and Drilling System) technology to produce artificial seeds for sugarcane varieties for the Australian sugarcane industry.
KEY FOCUS AREAS

**KFA1 / VARIETY DEVELOPMENT**
Key Focus Area 1 includes SRA’s core sugarcane plant breeding program for the production of new and improved sugarcane varieties and their release and distribution for commercial production. In addition, KFA1’s contestable investment portfolio is aimed at developing tools, technologies and platforms to enable the breeding program to develop those varieties including the exploration and creation of new genetic diversity and improved genome and trait knowledge.

**KFA2 / SOIL, HEALTH, NUTRIENT MANAGEMENT AND ENVIRONMENTAL SUSTAINABILITY**
Key Focus Area 2 contains SRA’s RD&A investments concerned with improving soil health, management of nutrients and chemical inputs, crop nutrition and adaptive variable climate conditions and the industry’s environmental sustainability and social licence to farm. The focus area addresses SRA’s dedicated Soil Health Program, charged with the coordination and delivery of the long-term investment needed to research and develop solutions to the industry’s soil-based constraints.

**KFA3 / PEST, DISEASE AND WEED MANAGEMENT**
Key Focus Area 3 houses SRA’s internal pathological and entomological expertise and capability to diagnose and manage domestic and international biotic threats to the Australian sugarcane industry. The focus area also comprises the portfolio of contestable research and development investment delivering improvements in pest, disease, weed management and SRA’s Yellow Canary Syndrome (YCS) research portfolio.

**KFA4 / FARMING SYSTEMS AND HARVESTING**
Key Focus Area 4 houses SRA’s research and development activities dedicated to optimisation of sugarcane farming and harvesting systems. The portfolio encompasses precision agriculture, water management and on-farm energy efficiency research. SRA also contains SRA’s flagship Harvesting Best Practices (HBP) program which is driving improvements in harvester design and practices with promising industry outcomes emerging from the harvesting groups participating in SRA’s demonstration trials.

**KFA5 / MILLING EFFICIENCY AND TECHNOLOGY**
Key Focus Area 5 houses SRA’s Investments pursuing greater milling process efficiency and utilisation, optimised cane quality and transport and improved sugar quality. The focus area includes SRA’s Internal near Infrared (NIR) capability supporting Australian millers in the sourcing, transport of cane and calibration of Cane, Sugar and Bagasse Analysis Systems and adoption of laboratory and online NIR solutions. KFA5 also includes SRA’s Small Milling Research Program providing a vehicle for targeted investment in small milling investor projects that develop a product, service or process that delivers tangible outcomes with immediate and ongoing revenue streams into the sugar sector.

**KFA6 / DIVERSIFICATION AND VALUE ADDITION**
Key Focus Area 6 comprises SRA’s product diversification and value addition portfolio. Investment in KFA6 encompasses the identification of new opportunities and uses for sugarcane, economic and market analysis of value-add opportunities and prioritisation of future industry diversification options. The focus area invests in the development of diversification and end-product revenue streams to safeguard industry profitability and sustainability.

**KFA7 / KNOWLEDGE TRANSFER AND ADOPTION**
Key Focus Area 7 focuses on the development and implementation of knowledge transfer and adoption strategies, processes and activities to enable transfer of research outputs and translation into on-the-ground outcomes. The focus area invests in the development of the knowledge transfer and adoption program, and the implementation of the strategy and partnerships to improve cane farm business, risk management and decision making. KFA7 also encompasses SRA’s Communication unit and industry engagement through the delivery of timely and professional communications and other communication across all media.

**KFA8 / COLLABORATION AND CAPABILITY DEVELOPMENT**
Key Focus Area 8 covers SRA’s efforts and investment towards ensuring the Australian sugarcane industry is highly skilled and is supported by a research workforce with the knowledge, capability and capacity to meet current and future industry needs. Through KFA8, SRA also actively invests in ‘industry good’ collaborative initiatives, such as social and scientific research into social license to operate and trade policy and market access research, and collaborations with other agricultural research and development corporations to leverage knowledge and resources, and extend SRA’s capacity to deliver value to industry and government investors.

**KFA9 / ORGANISATIONAL EFFECTIVENESS**
Key Focus Area 9 covers SRA’s RD&A investment management and corporate functions and aims to ensure SRA’s strategic and investment framework, governance processes and risk and asset management systems and processes can effectively support the delivery of an RS&A investment portfolio that delivers valued impact and returns on investment. KFA9 includes initiatives to strengthen organisational effectiveness and drive internal operations towards excellence through the ongoing enhancement of SRA’s value-based culture and performance-centric processes and systems, with a particular focus on improving investment decision-making and securing financial sustainability with highly skilled, innovative and engaged workforce.

**OUR KEY FOCUS AREAS:**

**ACTIVITIES**

**PRIORITIES (INCORPORATED INTO PROGRAMS)**

- Key Focus Area 1: Includes SRA’s core sugarcane plant breeding program for the production of new and improved sugarcane varieties and their release and distribution for commercial production. In addition, KFA1’s contestable investment portfolio is aimed at developing tools, technologies and platforms to enable the breeding program to develop those varieties including the exploration and creation of new genetic diversity and improved genome and trait knowledge.

- Key Focus Area 2: Contains SRA’s RD&A investments concerned with improving soil health, management of nutrients and chemical inputs, crop nutrition and adaptive variable climate conditions and the industry’s environmental sustainability and social licence to farm. The focus area addresses SRA’s dedicated Soil Health Program, charged with the coordination and delivery of the long-term investment needed to research and develop solutions to the industry’s soil-based constraints.

- Key Focus Area 3: Houses SRA’s internal pathological and entomological expertise and capability to diagnose and manage domestic and international biotic threats to the Australian sugarcane industry. The focus area also comprises the portfolio of contestable research and development investment delivering improvements in pest, disease, weed management and SRA’s Yellow Canary Syndrome (YCS) research portfolio.

- Key Focus Area 4: Houses SRA’s research and development activities dedicated to optimisation of sugarcane farming and harvesting systems. The portfolio encompasses precision agriculture, water management and on-farm energy efficiency research. SRA also contains SRA’s flagship Harvesting Best Practices (HBP) program which is driving improvements in harvester design and practices with promising industry outcomes emerging from the harvesting groups participating in SRA’s demonstration trials.

- Key Focus Area 5: Houses SRA’s Investments pursuing greater milling process efficiency and utilisation, optimised cane quality and transport and improved sugar quality. The focus area includes SRA’s Internal near Infrared (NIR) capability supporting Australian millers in the sourcing, transport of cane and calibration of Cane, Sugar and Bagasse Analysis Systems and adoption of laboratory and online NIR solutions. KFA5 also includes SRA’s Small Milling Research Program providing a vehicle for targeted investment in small milling investor projects that develop a product, service or process that delivers tangible outcomes with immediate and ongoing revenue streams into the sugar sector.

- Key Focus Area 6: Comprises SRA’s product diversification and value addition portfolio. Investment in KFA6 encompasses the identification of new opportunities and uses for sugarcane, economic and market analysis of value-add opportunities and prioritisation of future industry diversification options. The focus area invests in the development of diversification and end-product revenue streams to safeguard industry profitability and sustainability.

- Key Focus Area 7: Focuses on the development and implementation of knowledge transfer and adoption strategies, processes and activities to enable transfer of research outputs and translation into on-the-ground outcomes. The focus area invests in the development of the knowledge transfer and adoption program, and the implementation of the strategy and partnerships to improve cane farm business, risk management and decision making. KFA7 also encompasses SRA’s Communication unit and industry engagement through the delivery of timely and professional communications and other communication across all media.

- Key Focus Area 8: Covers SRA’s efforts and investment towards ensuring the Australian sugarcane industry is highly skilled and is supported by a research workforce with the knowledge, capability and capacity to meet current and future industry needs. Through KFA8, SRA also actively invests in ‘industry good’ collaborative initiatives, such as social and scientific research into social license to operate and trade policy and market access research, and collaborations with other agricultural research and development corporations to leverage knowledge and resources, and extend SRA’s capacity to deliver value to industry and government investors.

- Key Focus Area 9: Covers SRA’s RD&A investment management and corporate functions and aims to ensure SRA’s strategic and investment framework, governance processes and risk and asset management systems and processes can effectively support the delivery of an RS&A investment portfolio that delivers valued impact and returns on investment. KFA9 includes initiatives to strengthen organisational effectiveness and drive internal operations towards excellence through the ongoing enhancement of SRA’s value-based culture and performance-centric processes and systems, with a particular focus on improving investment decision-making and securing financial sustainability with highly skilled, innovative and engaged workforce.

**PRIORITIES (INCORPORATED INTO PROGRAMS)**

- Key Focus Area 1: Structures and modernise the breeding program and broaden the genetic base.

- Key Focus Area 2: Integrated and focused soil health program and enhance SIEASY STEPS guidelines and nitrogen management.

- Key Focus Area 3: Economic analyses and demonstration of new or improved technology, farm management practices and analysis tools.

- Key Focus Area 4: Enhanced capability and new technology for improving processing and energy efficiency.

- Key Focus Area 5: Optimised production, improved capital utilisation and waste minimisation.

- Key Focus Area 6: Diversified revenue streams and product innovation.

- Key Focus Area 7: Prioritised diversification opportunities for further RD&D activity or market analysis.

- Key Focus Area 8: New strategy targeting industry needs, problems and solutions.

- Key Focus Area 9: Leveraged industry, government and research partnerships and enhanced human capability programs.

**OUTCOMES**

- Increased sugarcane yield and commercial cane sugar (CCS).

- Better soil health, reduced nutrient losses and improved water quality.

- Reduced or avoided yield losses and input costs.

- Improved farm input-output efficiencies and profitability.

- Accelerated adoption of new technology and practice change.

- Enhanced efficiency of new technology and capacity.

- Embedded investor and performance-centric culture.

**OUR MEASURES OF SUCCESS:**

- Increasing profitability per tonne of sugarcane produced or processed.

- Improved industry sustainability.

- High impact return on investment.

**Our enablers:**

- Mapping the future – keeping abreast of and responding to current and emerging trends, issues and opportunities.

- Sustaining financial viability – achieving and maintaining a sustainable financial position for SRA.

- Partnering for impact – establishing new and strengthening existing partnerships to optimise RD&A outcomes.

- Innovating our science – fostering innovation, identifying transformative opportunities, adopting new technologies and enhancing capabilities.

- Optimising return on investment – enhancing our investment decision making and governance processes; and

- Transforming our business culture – fostering a more agile operating model and supporting our people, leadership and capacity.

**Our goals:**

- Drive profitability through innovation-led productivity gains, step-change and value-adding innovation.

- Improve sustainability through evidence-based research and sustainable production, biosecurity and environmental management.

- Enhance capability through strengthened research and industry partnerships, capability development programs and collaborative knowledge transfer and adoption mechanisms.

- Strengthen organisational excellence through enhanced RD&A investment management, best practice organisational governance and a positive performance-focused organisational culture.
**DELIVERABLES FOR 2020/21**

### KFA1 / VARIETY DEVELOPMENT

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>PRIORITIES</th>
<th>RD&amp;A ACTIVITIES</th>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.5M</td>
<td>Increased sugarcane yield and commercial cane CCS (US)</td>
<td>22 projects</td>
<td>Product 1: Restructure and modernise the sugarcane plant breeding program. Broaden the genetic base.</td>
</tr>
</tbody>
</table>

**KEY PROJECTS**

- New plant breeding program.
- Integration and enhancement of sugarcane varieties.
- Integration of novel variation from wild relatives.

**PROFITABILITY**

- Increased profitability through more productive varieties that are better aligned to specific regional and farm conditions, greater yield (tonnes or US) and/or less input intensive.

**SUSTAINABILITY**

- Enhanced sustainability through innovative sugarcane varieties that require less chemical and energy inputs, optimally suited to their local environment and with greater resilience to climatic conditions.

**CAPABILITY**

- Increased capability through a highly efficient plant breeding program with cutting-edge technology, and improved programs for delivery and greater selection of varieties.

**ORGANISATIONAL EXCELLENCE**

- Enhanced organisational excellence through more streamlined and timely variety development process.

### KFA2 / SOIL HEALTH, NUTRIENT MANAGEMENT AND ENVIRONMENTAL SUSTAINABILITY

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>PRIORITIES</th>
<th>RD&amp;A ACTIVITIES</th>
<th>OUTCOMES</th>
</tr>
</thead>
</table>

**KEY PROJECTS**

- Field-based crop system diagnosticians to detect root health.
- Soil health measurement, and benchmarks to drive practice change in the sugarcane industry.
- Regional trial of Enhanced Efficiency Fertiliser in the catchments of the Great Barrier Reef ( Reef Trust Phase IV funded project).
- Updating SIX EASY STEPS and development of an app to support decision making about nutrient management.

**PROFITABILITY**

- Safeguards and improved profitability through farming systems that optimise inputs (particularly nutrients, water and energy) and enhance soil health to support sustainable sugarcane production.

**SUSTAINABILITY**

- Maintained industry social licence to operate and enhanced sustainability through increased uptake of technology and management practices that optimise input use, improve natural resource health and minimise off-farm impacts.

**CAPABILITY**

- Increased capability through appropriate and timely evidence-based knowledge transfer between research enterprises, industry, investors and the advisory sector.

**ORGANISATIONAL EXCELLENCE**

- Enhanced organisational excellence through established regional networks, as well as collaborative partnerships and communication processes that identify and respond to regional issues in soil health and farming systems.

### KFA3 / PEST, DISEASE AND WEED MANAGEMENT

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>PRIORITIES</th>
<th>RD&amp;A ACTIVITIES</th>
<th>OUTCOMES</th>
</tr>
</thead>
</table>

**KEY PROJECTS**

- Assessment of international sugarcane varieties for SRSA breeding program.
- Disease, pest and pathogen screening, including testing for Xanthomonas oryzae pv. oryzae (XOYO) (former Xanthomonas oryzae pv. oryzae pv. oryzae [XOYO]).
- Modern diagnostics to maintain biosecurity of the Australian sugarcane industry.
- Quarantine service for Australian sugarcane industry.
- New international plant varieties.
- Pathogen and nematode analysis service.
- New disease diagnostic protocols for Sugarcane Mosaic Virus, Leaf spot and Sugarcane Yellow Leaf Virus.

**PROFITABILITY**

- Increased profitability through appropriate management resources and expertise in biosecurity, pathology, insecticology, diagnostics and weed agronomy.

**SUSTAINABILITY**

- Enhanced sustainability through biosecurity protection, reduced reliance on chemical interventions, and pest and disease management strategies with potentially reduced environmental impacts.

**CAPABILITY**

- Increased capability through access to appropriate management resources and expertise in biosecurity, pathology, insecticology, diagnostics and weed agronomy.

**ORGANISATIONAL EXCELLENCE**

- Enhanced organisational excellence through strong relationships with biosecurity agencies, agri-businesses, government and other bodies to ensure SRSA researchers knowledge is current and to enable continuous improvement and adoption of new technologies and practices to support biosecurity, pest, disease and weed management RD&A.

### KFA4 / FARMING SYSTEMS AND HARVESTING

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>PRIORITIES</th>
<th>RD&amp;A ACTIVITIES</th>
<th>OUTCOMES</th>
</tr>
</thead>
</table>

**KEY PROJECTS**

- Regional focused programs to improve irrigation system selection and operation (Smarter Irrigation Phase 2).
- Understanding the effect of grain legume crops on productivity and soil biology of subsequent sugarcane crops (Southern Sugar Solutions).
- Development of a harvesting predictive model tool to assist growers and harvesters to assess and implement alternative harvesting systems.

**PROFITABILITY**

- Increased profitability through optimisation of sugarcane farming and harvesting practices and thereby value chain efficiencies.

**SUSTAINABILITY**

- Optimised sustainable sugarcane production through appropriate and timely evidence-based farming and harvesting systems that maximise yield and enhance the value of natural capital on farm and farm.

**CAPABILITY**

- Enhanced regional governmental, grower, harvester and advisory sector capability to improve farming and harvesting systems.

**ORGANISATIONAL EXCELLENCE**

- Enhanced organisational excellence through application of farming best management practices on SRSA, establishment of regional collaborations for practical demonstration and case studies, and attraction and retention of researchers, agronomists and adoption officers with on-ground sugarcane knowledge and networks.

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* A full list of RD&A projects can be found on the RD&A Investment Portfolio Summary on SRA’s website at sugarresearch.com.au.
* Projects may predict a single output or multiple outputs in one or more output category.
SUGAR RESEARCH AUSTRALIA LIMITED ANNUAL OPERATIONAL PLAN 2020-2021

**KFA5 / MILLING EFFICIENCY AND TECHNOLOGY**

**INPUTS**  
$0.20M  
Enhanced capability and new technology for improved processing and energy efficiency

**PRIORITIES**  
- Key areas
  - Improved yield
  - Enhanced energy efficiency

**BDRA ACTIVITIES**  
- 34 projects

**OUTCOMES**  
- Improved yield
- Enhanced energy efficiency

**KEY PROJECTS**
- Implementation of new milling research program addressing industry priorities
- Cane Analysis System (CAS)/Near Infra-Red (NIR) service and support for mills
- Developing a new process for coating roll surfaces to increase durability and eliminate the need for in-season roll-turning

**SUSTAINABILITY**
- Increased profitability through reduced costs of production, improved market access due to high quality product and improved capital utilisation

**KEY IMPACTS**
- Enhanced sustainability through improved processing and energy efficiencies and waste management strategies

**KFA6 / PRODUCT DIVERSIFICATION AND VALUE ADDITION**

**INPUTS**  
$0.20M  
Prioritised diversification opportunities for further R&D activity or market analysis

**PRIORITIES**  
- Key areas
  - New product ideas
  - New business models

**BDRA ACTIVITIES**  
- 3 project

**OUTCOMES**  
- Diversified revenue streams
- Product innovation

**KEY PROJECTS**
- Biorefinery technology and intellectual property (IP) for production of animal feed from sugarcane bagasse
- Marlen and technology watch service for identifying diversification opportunities in the Australian sugarcane industry

**SUSTAINABILITY**
- Sustained industry profitability secured through diversified sugarcane and sugarcane by-product revenue streams and meaningful value addition through product innovation

**KEY IMPACTS**
- Enhanced sustainability of industry through diversified product streams, including alternative uses for sugarcane waste

**KFA7 / KNOWLEDGE AND TECHNOLOGY TRANSFER AND ADOPTION**

**INPUTS**  
$1.06M  
Leveraged industry, government and research partnerships to enhance human capability and capacity

**PRIORITIES**  
- Key areas
  - Training and education
  - Professional development

**BDRA ACTIVITIES**  
- 16 projects

**OUTCOMES**  
- Enhanced efficiency and more highly skilled research capability and capacity

**KEY PROJECTS**
- Investment and in-kind participation in sectoral and cross-sectoral collaborative projects
- Life Cycle Analysis database and tool
- Sugar Industry Research Awards, Postgraduate Research Scholarships, Travel and Learning Awards

**SUSTAINABILITY**
- Increased profitability through accelerated innovation resulting from enhanced industry and research capability and capacity

**KEY IMPACTS**
- Increased profitability through accelerated innovation resulting from enhanced industry and research capability and capacity

**KFA8 / COLLABORATION AND CAPABILITY DEVELOPMENT**

**INPUTS**  
$1.04M  
Leveraged industry, government and research partnerships to enhance human capability and capacity

**PRIORITIES**  
- Key areas
  - Research and development
  - Industry collaboration

**BDRA ACTIVITIES**  
- 20 projects

**OUTCOMES**  
- Enhanced collaboration and engagement with government, industry and cross-sectoral stakeholders in innovation and networks

**KEY PROJECTS**
- Industry good collaborative research and networking, including Life Cycle Analysis
- RD&A partnerships, collaborations and networks to leverage investment, multi-disciplinary capability and multi-sectoral research
- Sugar Industry Research Awards, Postgraduate Research Scholarships, Travel and Learning Awards

**SUSTAINABILITY**
- Maintained social licence to operate and industry satisfaction with SRA

**KEY IMPACTS**
- Enhanced organisational excellence through effective partnerships with stakeholders

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* A full list of RD&A projects can be found in our RD&A Investment Portfolio Summary on SRA’s website at sugarresearch.com.au.

* Projects may produce a single output or multiple outputs in one or more output categories.
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Projects may produce a single output or multiple outputs in one or more output category.

### KFA9 / ORGANISATIONAL EFFECTIVENESS

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>PRIORITIES</th>
<th>RD&amp;A ACTIVITIES</th>
<th>OUTPUTS</th>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10.33M</td>
<td>Embedded investor and performance culture</td>
<td>23 projects</td>
<td>33 projects</td>
<td>Enhanced efficiency and drive increased investor satisfaction and returns on investment</td>
</tr>
</tbody>
</table>

- **INPUTS**: Product, Scientific knowledge, Soft Technology, Tool/Enabler, Communication/Capacity Builder
- **PRIORITIES**: Improved investor and performance-centric culture
- **RD&A ACTIVITIES**: 23 projects
- **OUTPUTS**: Enhanced efficiency and drive increased investor satisfaction and returns on investment
- **OUTCOMES**: 33 projects

### KEY PROJECTS

- Budget and resource prioritisation measures to achieve a sustainable financial position and improve treasury and budgetary management and oversight
- Risk Management Framework review
- SRA Independent Performance Review
- SRA strategy and operating model review, including review of SRA’s investor/provider model, research capability and asset base
- Workplace health, safety and environmental management framework and system improvements, reporting and support services, including ongoing COVID-19 Management Plan
- Review core competencies of staff and learning and development programs to align skill sets with strategic priorities identified in new Strategic Plan

### KEY OUTPUTS

- Independent Performance Review
- Report and SRA Implementation Plan
- Monitoring and Evaluation Framework for assessing adoption, practice change and RD&A impacts
- New Strategic Plan, operating model and organisational structure
- Workforce Strategy and Workforce Capability Development Plan

### RPIs

1. Implementation of new Strategic Plan by September 2020 and Annual Operational Plan by December 2021
2. SRA Investor performance rating increase to 85% by 2022
3. Aggregated research investment benefit-cost ratios of 4:1 or above
4. Maintain 100% compliance with statutory and contractual requirements
5. Implementation of SRA COVID-19 Safety Management Plan and verification process of sites compliance by July 2020
6. Implementation of an approved Safety Improvement Plan (with KPI’s) in place by September 2020 and achievement of targets specified in the plan by June 2021

### KEY IMPACTS

**SUGAR RESEARCH AUSTRALIA LIMITED**

**ANNUAL OPERATIONAL PLAN 2020-2021**

<table>
<thead>
<tr>
<th>PROFITABILITY</th>
<th>SUSTAINABILITY</th>
<th>CAPABILITY</th>
<th>ORGANISATIONAL EXCELLENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry profitability supported through RD&amp;A investment management that delivers value and positive returns on investment</td>
<td>Industry sustainability supported through investment in and management of evidence-based RD&amp;A portfolio focused on conserving resources, reducing waste generation and environmental management</td>
<td>Support industry capability and maintain research capability through effective attraction, retention and up-skilling of high-calibre research and corporate professionals, and the retention and management of Intellectual Property and corporate knowledge</td>
<td>Enhanced organisational excellence through an RD&amp;A investment portfolio aligned with investor priorities and supported by robust and responsive corporate and governance systems, with highest level of organisational probity, integrity and compliance</td>
</tr>
</tbody>
</table>

* A full list of RD&A projects can be found in our RD&A Investment Portfolio Summary on SRA’s website at sugarresearch.com.au.
* Projects may produce a single output or multiple outputs in one or more output category.
FORECAST $ AGAINST NATIONAL SCIENCE PRIORITIES

RD&E PRIORITIES

The ethos that underpins both SRA’s Strategic Plan and this AOP is one that is outcome and investor focused, consultative and collaborative. SRA is committed to listening to our investors, understanding their needs and responding to these needs through innovative RD&E solutions that are successfully adopted and deliver significant value for the industry as a whole, as well as benefits for the broader Australian community.

The key deliverables laid out in this AOP respond, within the constraints of our budget, to the priority challenges and opportunities of the sugarcane industry and, more broadly, the priorities of the agricultural sector, government and the wider Australian public. More specifically, the KFAs and associated RD&E activities respond to the issues raised during consultation with industry, government and researchers, as well as the principles, strategies and priorities set out in the following strategic documents:

- Department Strategic Objectives for funding projects for SUGARCANE, Queensland Department of Agriculture and Fisheries, 2018.

There is strong alignment across these priorities, particularly with respect to: delivering value for money; increasing profitability and productivity; enhancing environmental sustainability; advancing innovation; and improving adoption of RD&E. A matrix detailing the alignment between the research programs under each of SRA’s KFAs and the key industry and government priorities is provided in the following section.

Figures 1 and 2 detail the proportion of SRA’s estimated investment for 2020/21 that align with the National Science and Research Priorities and the Rural RD&E Priorities.

ALIGNMENT OF SRA’S KFAS TO INDUSTRY AND GOVERNMENT PRIORITIES

3 Other includes unallocated research, RD&E investment management, research costs and corporate support.

FIG 1: FORECAST EXPENDITURE 2020/21 Science & Research Priorities

- Food $35.6M (47%)
- Soil and water $5.5M (16%)
- Transport $34M (50.94%)
- Energy $16M (2.3%)
- Advanced manufacturing $1.4M (6%)
- Environmental change $2.9M (4%)
- Other a $10.1M (30.37%)

FIG 2: FORECAST EXPENDITURE 2020/21 Rural RD&E Priorities

- Advanced technology $8.2M (22.12%)
- Biosecurity $6.4M (17.77%)
- Soil/water/NRM $8.8M (24.76%)
- Adoption $5.2M (14.94%)
- Other a $10.1M (28.02%)

3 Other includes unallocated research, RD&E investment management, research costs and corporate support.
TABLE 1: FORECAST INCOME AND EXPENDITURE 2020/21

<table>
<thead>
<tr>
<th>OPERATING INCOME</th>
<th>2020/21 [SR]</th>
</tr>
</thead>
<tbody>
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<td>Industry investment</td>
<td>21,800</td>
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<tr>
<td>Commonwealth co-investment</td>
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<tr>
<td>Queensland Government co-investment</td>
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<tr>
<td>Collaboration/Service fee income</td>
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<tr>
<td>Interest</td>
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<tr>
<td>Other</td>
<td>592</td>
</tr>
<tr>
<td>Operating income total</td>
<td>35,388</td>
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</table>

<table>
<thead>
<tr>
<th>OPERATING EXPENDITURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>RD&amp;A expenditure total</td>
</tr>
<tr>
<td>RD&amp;A</td>
</tr>
<tr>
<td>Corporate</td>
</tr>
<tr>
<td>Board and investor relations</td>
</tr>
<tr>
<td>Corporate support</td>
</tr>
<tr>
<td>Operating expenditure total</td>
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<tr>
<td>SRA operating result for the year</td>
</tr>
</tbody>
</table>

SRA RD&A INVESTMENT AND ORGANISATIONAL EXPENDITURE

<table>
<thead>
<tr>
<th>KFA</th>
<th>MILLION</th>
</tr>
</thead>
<tbody>
<tr>
<td>KFA1</td>
<td>VARIETY MANAGEMENT</td>
</tr>
<tr>
<td>KFA2</td>
<td>SOIL, WATER, NUTRIENT MANAGEMENT, AND ENVIRONMENTAL SUSTAINABILITY</td>
</tr>
<tr>
<td>KFA3</td>
<td>PEST, DISEASE AND WEED MANAGEMENT</td>
</tr>
<tr>
<td>KFA4</td>
<td>FARMING SYSTEMS AND HARVESTING</td>
</tr>
<tr>
<td>KFA5</td>
<td>MILLING AND MILLS</td>
</tr>
<tr>
<td>KFA6</td>
<td>PRODUCT DIVERSIFICATION AND VALUE ADDITION</td>
</tr>
<tr>
<td>KFA7</td>
<td>KNOWLEDGE AND TECHNOLOGY TRANSFER AND ADOPTION</td>
</tr>
<tr>
<td>KFA8</td>
<td>COLLABORATION AND CAPABILITY DEVELOPMENT</td>
</tr>
<tr>
<td>KFA9</td>
<td>ORGANISATIONAL EFFECTIVENESS</td>
</tr>
<tr>
<td>Total expenditure</td>
<td>$36.9M</td>
</tr>
</tbody>
</table>

TABLE 2: INCOME AND EXPENDITURE FORECAST

- Income and expenditure allocation across the KFAs. Reflective of investor expectations with respect to SRA’s RD&A investment and, in line with SRA’s Strategic Plan, the majority of investment lies within our plant breeding program under KFA1. A full breakdown of KFA investment by projects can be found in our RD&A investment. Portfolio Summary on SRA’s website at sugarresearch.com.au.
- SRA’s commitment to ensuring it invests, manages and participates in a balanced portfolio of RD&A activities that is appropriate to meeting investor needs and providing an attractive return on investment.
- To achieve an optimally-balanced investment portfolio, SRA will undertake:
  - Align RD&A investment with industry and government investor priorities at both regional and industry levels;
  - Invest in short, medium and long-term projects across the research pipeline;
  - Address current gaps in the existing portfolio in terms of delivering on the objectives of SRA’s Strategic Plan;
  - Appropriately manage RD&A risk-profile, with a combination of low-risk projects targeting incremental improvements and higher-risk transformational projects;
  - Leverage investment through partnerships and collaborations; and
  - Maximise return for our investors through increased adoption and practice change.
- SRA’s RD&A portfolio comprises both core and contestable RD&A projects. The core projects are undertaken internally by SRA and include plant breeding, biosecurity and adoption activities. The contestable projects are undertaken by both SRA and external providers and cover the gamut of SRA’s KFAs.

SRA’s investment framework, funders/provider model and risk management framework are currently under review with a view to enhancing our investment decision-making and processes to ensure we provide a balanced portfolio that meets the needs and expectations of our investors, now and into the future. In doing so, SRA will continue to engage and consult on a regular basis with industry and government investors, industry representative bodies and regionally-based advisory groups and committees to identify RD&A priorities – at both a regional and whole-of-industry level – and report on the performance of SRA’s RD&A investment portfolio in terms of outputs, outcomes and return on investment being delivered.
Acknowledgements

SRA acknowledges and thanks its investors, including levy payers (sugarcane growers and millers), the Commonwealth Government and the Queensland Government.