

# **ORGANISATIONS**

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THE Queensland sugar industry has had a reputation as the most highly regulated primary industry in Australia. In the past, there were regulations regarding the purchase of a farm, the production from the farm, the mill to which the cane should be delivered, and the price to be paid for the cane. There was also an embargo on imported sugar, and there was a guaranteed price for all sugar sold in the domestic market. However, in recent years, the industry has undergone deregulation in an endeavour to make it more competitive on the world market. Nevertheless, there is still compulsory acquisition of all cane, and marketing of sugar is based on a single-desk seller arrangement.

Over the years, the Queensland industry has been served by a large number of organisations. Several of these have merged or ceased to exist for various reasons. Nevertheless, there are still numerous organisations that serve the industry in various capacities. In this chapter, the purpose and activities of the most important of them are outlined.

# QUEENSLAND SUGAR

Queensland Sugar is an industry-owned company responsible for marketing all raw sugar produced in Queensland to both international and domestic markets, under a single-desk arrangement. It markets the State's entire raw sugar production, on behalf of Queensland's canegrowers and mill owners, to customers in Australia and around the world, and generates total annual revenue around \$1.5 to \$2 billion.

Queensland Sugar's marketing activities date back to 1923 when the Sugar Board was established by the Queensland Government to sell the state's raw sugar production. Under the Sugar Industry Act 1991, a new statutory body called the Queensland Sugar Corporation took over this marketing role and the production regulation responsibilities of the Central Sugar Cane Prices Board (1915–1991). In 1995, the Commonwealth Government recommended that the

sugar industry review Queensland its marketing operations to ensure the most efficient marketing system was in place to enable the industry to remain competitive on a world scale. As a result of the review, the private industry-owned marketing company, Oueensland Sugar Limited, was formed in July 2000 under the Sugar Industry (Amendment) Act 2000. It is totally owned and funded by Queensland's raw sugar producers through the proceeds of raw sugar sales and does not receive any government funding. The shareholders of Queensland Sugar are the 26 mills owned by the 11 mill owners (in the name of the representative companies), Local Mill Suppliers' Committees (who each elect a representative member), the Australian Cane Farmers Association (ACFA) and CANEGROWERS. Individuals in the sugar industry are not shareholders. Queensland Sugar is a company limited by guarantee, incorporated under the Corporations Law of Queensland.

Oueensland Sugar assumed the marketing functions previously undertaken by Queensland Sugar Corporation and its exportmarketing agent, CSR Raw Sugar Marketing, with staff comprised of people from both organisations. Behind Queensland Sugar is a strong management team led by a 12-member Board and 180 full-time staff, based at the Brisbane corporate office and at Queensland's seven bulk sugar terminals at Cairns, Mourilyan, Lucinda, Townsville, Mackay, Bundaberg and Brisbane. Queensland Sugar continues to manage, operate and maintain the bulk sugar terminals. The terminals, worth an estimated \$350 million, have been transferred from the Port Authorities to the industry-owned company, Sugar Terminals Limited (STL), in which growers and millers hold shares. Queensland Sugar will lease the bulk sugar terminals from STL.

Queensland Sugar promotes the development of Queensland's sugar industry through: maintaining our efficiency and competitiveness; enhancing the industry's longterm profitability; encouraging initiative, innovation and value-adding; marketing raw sugar globally in the best interests of the industry; providing timely and relevant sugar market information; and using responsible environmental practices.

#### CANE PRODUCTION BOARDS

In the Sugar Industry Act 1999, Cane Production Boards were established with the objectives of ensuring the efficient participation by growers supplying cane to a mill and the mill owner in the scheme established under the Act, enhancing the benefits to the growers and mill owner from cane production and milling, and helping the sustainable production of cane on land included in cane production areas relating to a mill.

A Cane Production Board administers the granting, transfer, cancellation or variation of cane-production areas relating to a mill and other matters relating to the cane-production areas. It implements the decisions of the negotiating team established for the mill about expansion in cane-production areas relating to the mill. It develops guidelines about land use, the environment and transport applying in relation to applications for grants of cane-production areas or increase in cane-production areas relating to the mill. It also administers the processes relating to moving cane supply between mills, including the consent process, horizontal expansion process, and productivity increase process. Overall, a board can develop guidelines about anything relevant to canegrowing on land included in caneproduction areas relating to the mill and perform any other functions delegated to it.

# AUSTRALIAN CANE FARMERS' ASSOCIATION

The Australian Cane Farmers' Association (ACFA) was established in 1987, following the decision to disband the Australian Sugar Producers' Association (ASPA). ASPA was a voluntary organisation, formed in 1907, to represent the interests of both millers and

growers. When the Australian Sugar Milling Council (ASMC) was formed, milling groups decided that their interests would be served by ASMC and that they no longer needed an organisation like ASPA. Some growers who were involved with ASPA felt that there was still a need for a voluntary organisation to represent the interests of the farming community, and they formed ACFA.

ACFA's membership includes cane farmers from Queensland and NSW, and the organisation aims to be a politically neutral voice safeguarding the interests of cane farmers. The organisation is involved in joint industry committees such as the Sugar Industry Review Working Party, selection committees for Queensland Sugar Limited (QSL) and BSES Directorships, and consultative committees for QSL, SRDC, and BSES.

ACFA also provides discounts for its members on various items of equipment, and it promotes the Australian Canefarmers Insurance scheme.

# AUSTRALIAN MOLASSES TRADING PTY LTD

Australian Molasses Trading Pty Ltd (AMT) was formed in 1993 to export all bulk molasses that is excess to the requirements of the Australian domestic market. Domestic sales of molasses are conducted by the individual mills and milling companies who sell direct into customers' bulk tankers. AMT replaced the organisation known as the Australian Molasses Pool, which operated between 1963 and 1993. All mills that are likely to have an exportable surplus of molasses are members of AMT. Under an agreement, CSR Limited acts as manager for AMT, co-ordinates the export of molasses on behalf of AMT and is responsible to a Board of Directors.

Bulk molasses terminals are located at the ports of Cairns, Mourilyan, Townsville, Mackay and Bundaberg. Surplus molasses is transported by either road truck or rail wagon to the nearest port storage tanks. Terminals are owned by the local mills in each terminal region.

Molasses is an agricultural co-product of sugar milling and varies in quality according to seasonal conditions. It is shipped FOB in bulk marine tankers, basis 85 degrees brix from Queensland ports during the period July to November each year. Australian blackstrap cane molasses is used mainly in the fermentation (ethyl alcohol, yeast, lysine and monosodium glutamate) and stockfeed industries and has traditionally been sold through trading houses.

Annual export sales in excess of 600,000 tonnes are made to markets in USA, Asia/Far-East, New Zealand and UK/Europe. It is sold on the basis that it shall be of sound and merchantable quality, free from adulteration or contamination, but with no warranty of suitability for human consumption.

### AUSTRALIAN SUGAR MILLING COUNCIL

The Australian Sugar Milling Council (ASMC) was formed in December 1987 as the policy body representing the interests of raw sugar manufacturers in Australia. Membership of ASMC is voluntary and owners of all Queensland mills are members. The Council's mission is to promote the balanced development of the raw sugar industry in Australia and to safeguard the interests of sugar millers.

The organisation provides a range of services including industrial relations, professional support on legal, organisational, taxation, technical, training, safety and environmental matters, and makes representations to governments and to special inquiries. It also co-ordinates group purchasing for its members.

Representatives from each milling company form a Milling Council. Membership of various advisory committees is drawn from mill owners in each of the four regions.

#### **CANEGROWERS**

Queensland Cane Growers Organisation Ltd, commonly known as CANEGROWERS, is one of Australia's largest and most influential farmer representative bodies with offices in all Queensland sugar-producing districts and more than 100 fulltime professional staff.

Although it was established in 1925, the organisation recently underwent a major transformation of its corporate identity. On 21 January 2000, Queensland Parliament passed the *Primary Industries Bodies Reform Act 1999*, ushering in a new era of grower representation.

The new legislation repealed the statutory marketing provisions and compulsory levy funding arrangements which previously applied to CANEGROWERS and similar farmer representative bodies. However, a transitional arrangement made it compulsory for the State's 6500 canegrowers to be members of CANEGROWERS for at least the next 3 years.

A new entity, Queensland Cane Growers Organisation Ltd (a public company limited by guarantee) replaced the former statutory peak body which was constituted under Section 30 of the *Primary Industries Organisation and Marketing Act 1926.* 

The CANEGROWERS organisation's three-level structure comprises local area Mill Suppliers' Committees, District Executives and the Queensland Cane Growers Organisation Ltd (QCGO). One of QCGO's first tasks was to initiate a comprehensive review to determine future organisation activities and the most efficient operating structure necessary to achieve desired outcomes.

The Primary Industry Bodies Reform Act 1999 created 34 individual trusts for the administration of District Executives and Mill Suppliers' Committees with QCGO Ltd acting as trustee. Although there is a high level of cooperation between these elements, each operates as an autonomous business unit. Activities are funded by growers, and policy

is set by grower directors who are elected every 3 years.

CANEGROWERS seeks to ensure a secure and profitable future for canegrowers through representation, leadership and services, and promotion of unity among growers. It also provides a direct link between growers and government.

CANEGROWERS represent growers, directly and indirectly, on every significant body involved with the Australian raw sugar industry. The organisation unites the resources of all growers and coordinates their efforts to achieve a favourable operating environment for secure, profitable and sustainable cane growing.

In addition to representation, it facilitates a wide range of services for canegrowers including crop and general insurance, cane testing, legal services, financial, insurance, and communications services, and a CANECARD buying service.

#### SUGAR MILLING COMPANIES

#### **CSR** Limited

CSR is Australia's largest sugar company, and operates seven sugar mills in Queensland. It is a 50% partner in Sugar Australia, which operates sugar refineries in Mackay, New Zealand and Melbourne.

Until the end of 1999, CSR Raw Sugar Marketing also provided export marketing and distribution services for the Queensland Sugar Corporation. Other activities include producing and marketing ethanol (50% of Australia's production), solvents and specialty chemicals as well as marketing a range of specialty food ingredients. CSR is also involved in cogeneration of electricity for supply into the Queensland power grid.

CSR has been actively involved in cane, milling and raw sugar research over many years.

#### **Bundaberg Sugar Limited**

Bundaberg Sugar Company Limited is Australia's largest canegrower, has seven sugar mills, a refinery, and a rum distillery. It also operates Bundaberg Foundry Engineers and Bundaberg Molasses. It is wholly owned by Finasucre, a Belgian private company with interests in sugar, sugar derivatives, tropical plantations, and aroma chemicals. Bundaberg Sugar built the first mill constructed in Queensland since 1925 when it built its Tableland mill which commenced crushing in 1998.

Bundaberg Sugar is involved in milling research but is not actively involved in agricultural research. However, the company funds a BSES officer to provide productivity services in the Bundaberg district.

#### Mackay Sugar Cooperative Association Limited

Mackay Sugar manufactures sugar from sugar cane supplied by its shareholder farmers. It is one of Queensland's largest private companies and Australia's second largest sugar miller. Mackay Sugar Co-operative Association Limited was formed in 1988 from a merger of five Mackay District co-operatives with traditions going back over a century. At the time of merger, Pleystowe Mill was purchased from CSR and, through a rationalisation of the group's operations over the next 3 years, the smaller Cattle Creek and North Eton mills were closed down, leaving Mackay Sugar with four raw sugar factories.

In 1998, Mackay Sugar entered into a refining joint venture with CSR and international sugar trading company ED & F Man, to form Sugar Australia. The joint venture operates sugar refineries at Mackay (Racecourse) and Melbourne (Yarraville) along with packaging plants for retail and industrial sales at Mackay, Sydney and Melbourne. White sugar storage and handling facilities are also located at Mackay and Sydney.

Sugar Australia operates the MRS Pioneer, the only bulk in, bulk and bag out white sugar ship in the Southern Hemisphere. The joint venture partners also share ownership of the New Zealand Sugar Corporation. Mackay Sugar's four factories are capable of manufacturing about 1 million tonnes of sugar in a 23-week crushing period from about 8 million tonnes of cane grown by its 1100 shareholder farmers. Mackay Sugar employs approximately 1100 people during the crushing season each year.

# New South Wales Sugar Milling Cooperative

The New South Wales Sugar Milling Cooperative was formed when canegrowers purchased the three New South Wales sugar mills in 1978 from CSR Limited. The mills are located at Condong on the Tweed River. Broadwater on the Richmond River and Harwood on the Clarence River. In 1988, the Cooperative and the Manildra established a joint venture called Manildra Harwood Sugars to build a sugar refinery adjacent to the Harwood Mill. The refinery produces refined sugar under the brand name Sunshine Sugar. The refinery operates all year round and purchases sugar from the growers' cooperative. Sunshine Sugar is supplied mainly to the domestic industrial market, comprising food and beverage manufacturers and repackers.

In 1992, the Cooperative and BSES signed a Memorandum of Understanding for BSES to supply certain services to the NSW sugar industry. The principal services are a variety selection program, extension, agronomic research, and advice on pathology and agricultural engineering.

#### Individual mills

Eight other mills operate as separate entities. In far north Queensland, four mills are largely grower-owned and controlled, and these have formed an association called Sugar North Limited (SNL). SNL, in association with BSES, has been involved in the development of near infra-red spectroscopy (NIR) for use in sugar mills, and the four SNL mills will be the first mills to fully implement on-line analyses with NIR.

Proserpine Mill and Isis Mill near Childers are also grower-owned and controlled. Maryborough Sugar Factory is a publicly listed company that runs the sugar mill at Maryborough, while Rocky Point Mill south of Brisbane is the only privately owned sugar mill in Australia.

The Ord River sugar mill in Western Australia was constructed by CSR Ltd in 1995. In 2000, CSR sold this mill to the Cheil Jedang Corporation of South Korea.

#### TECHNICAL ORGANISATIONS

#### **Bureau of Sugar Experiment Stations**

The Bureau of Sugar Experiment Stations (BSES) is the principal provider of research, development, and extension in the sugar industry. It is committed to increasing the productivity, profitability, and sustainability of the industry and the transfer of technology to sugarcane growers and raw sugar millers. It was established by an Act of Parliament in 1900 as the official research instrumentality for the Queensland sugar industry. It is the oldest of the organisations that function within the industry.

BSES operates experiment stations at Meringa (near Cairns), Tully, Ingham, Ayr, Mackay, and Bundaberg. It also has an experiment station for disease testing at Woodford, north of Brisbane, and its Head Office is located in Indooroopilly in Brisbane. It also has extension centres at Innisfail, Proserpine, Sarina, Childers, Maryborough, and Nambour. In New South Wales, it has staff located at each of the three mills.

The BSES Board is charged with the responsibility for setting policy for the organisation. The Board consists of an independent Chairman with extensive commercial experience, two directors with experience in production of cane, two directors with experience in milling of cane, one director with experience in R,D&E, and one director with wide commercial experience. The Chief Executive Officer of BSES is a member of the Board ex officio.

The functions of BSES were defined in the Sugar Industry Act 1999. It participates in investigating and evaluating the requirements for research relating to the growing of cane in Oueensland and conducts, arranges or funds research and extension on all matters related to the breeding, production, harvesting, transport or processing of cane. BSES develops, or helps to develop, methods of sustainable production of cane. Within the milling sector, it develops cane analysis standards, helps the commissioner in implementing cane analysis programs, provides a service for the checking and certification of the accuracy of laboratory equipment used in deciding the relative quality of sugar for the purposes of payments. It also monitors and seeks to improve the quality of cane and cane products. In naturalresource management, BSES provides advice on the ability of land to sustain crops, and helps keep to a minimum any damage to natural resources and the environment that may be caused by the activities of the Oueensland sugar industry. In 2000, BSES also took responsibility for the Cane Analysis and Audit Service.

To allow it to fulfill these obligations, BSES can commercially exploit the products of its research, development, and extension activities, and can collaborate with other research providers, Cane Protection and Productivity Boards and industry in the coordination of local research, development, and extension.

BSES also has an obligation under the *Plant Protection Act 1989*, to prevent, control and eradicate pest infestations in cane.

#### Cane Protection and Productivity Boards

Cane Protection and Productivity Boards (CPPBs) have been set up in all cane growing districts of Queensland, except on the Atherton Tableland. Each board consists of representatives from the milling and growing sectors and BSES, and employs staff to assist with disease and pest control. In addition, the staff have a productivity role, so they are

involved in assisting growers to improve their productivity. The CPPBs and BSES work closely together to achieve the best results possible for the industry.

The CPPBs are constituted under the Sugar Industry Act 1999, which defines their functions. A CPPB provides suitable advice and help to cane growers within its area about the prevention, control and eradication of pest infestation of cane or any other matter or thing that adversely affects the quantity or quality of crops of cane, and about the production and harvesting of cane. Each board helps and cooperates with other organisations involved in cane pest and disease research, and production, harvesting, transport and processing of cane. Boards provide advice and information about the preservation and enhancement of the capacity of land to sustain crops of cane, and help minimise any damage to the environment that may be caused by activities of the sugar industry within its area.

# Cooperative Research Centre for Sustainable Sugar Production

The Cooperative Research Centre Sustainable Sugar Production (CRC Sugar) facilitates a collaborative approach to research aimed at enhancing the industry's position as an internationally competitive environmentally responsible sugar industry. Based at James Cook University, CRC Sugar is comprised of specialists from its 13 member parties, which include Bundaberg Sugar Ltd, CSR Ltd, Mackay Sugar Cooperative Association Ltd. NSW Sugar Milling Cooperative Ltd. Sugar North Ltd, CANEGROWERS, BSES, CSIRO, Queensland Department of Natural Resources, James Cook University, Central Queensland University, the University of Queensland and SRDC.

CRC Sugar has three collaborative programs, protecting the environment, sustaining soil and water, enhancing productivity, and three cross programs, education, technology transfer, and systems analysis and modelling. Through these

programs, it seeks to address a number of issues associated with sustainable sugar production, such as profitability, environment and water quality, sustainable irrigation, soil health and nutrition, and economics and decision support.

# Cooperative Research Centre for Tropical Plant Protection

Established in 1992 as the CRC for Tropical Plant Pathology, the CRC for Tropical Plant Protection won a second term of Commonwealth funding of \$13.9 million over 7 years in December 1999. The Centre is based at The University of Queensland. BSES is a major partner, with other centre partners being Queensland Department of Primary Industries, CSIRO, RhoBio (a private, multinational company), Australian National University, NT Department of Primary Industry & Fisheries, Northern Territory University, and Department of Agriculture, Fisheries & Forestry-Australia.

The Centre's industry-focussed research programs have been developed after extensive consultation with industry and other stakeholders. Research outcomes are principally in the areas of disease and pest prevention through improved diagnostics and new sources of plant resistance to diseases and pests.

# **CSIRO** Coastal Cropping Systems

The CSIRO Coastal Cropping Systems Research Group takes a whole-of-system approach to delivering, to industry and the community, options for the sustainable use of biophysical, economic and social resources in sugarcane and other cropping systems in coastal regions. The goal is to ensure the sustainability of farm enterprises, agribusiness and resource-sharing communities. It does this at two levels: the farm paddock and the whole of industry.

At the farm level, the aim is to develop and apply strategies for best utilising the primary resources for plant production (radiation, water and nitrogen) given the highly variable nature of climate, soils, production systems, and cost/price structures in coastal systems. At the whole industry level, the aim is to deliver options for best use of industry resources by exploiting linkages and interdependencies across the value chain of agricultural industries.

#### CSIRO Division of Land and Water

The former CSIRO Division of Soils, and more recently, CSIRO Land and Water, through its Tropical Land and Water Management Program, has been providing a significant R&D effort to underpin the productivity and ecological sustainability of the Australian sugar industry over the past 10 years.

While in the past, emphasis was on understanding physical and chemical properties of tropical soils and their distribution in the Wet Tropics, the more recent emphasis has been on a variety of significant industry issues and some of the environmental aspects of sugarcane production. The program collaborates with BSES and the CRC for Sustainable Sugar Production on integrated drainage management and reducing sediment and nutrient export from low-lying caneland in the Herbert district. It researches the management of soil acidification and nutrients in a variety of projects in the Wet Tropics in collaboration with BSES, CSR and the CRC for Sustainable Sugar Production, and minimising ground water pollution with the CRC for Sustainable Sugar Production, LWRRDC, CSIRO Tropical Agriculture and QDNR, mainly in the Bundaberg and Herbert districts. It is also a partner with SRDC, BSES and QDPI in the sugar yield decline joint venture across all major districts.

#### **CSIRO Sugarcane Improvement**

CSIRO has been involved in research on the genetic improvement of sugarcane since 1988. The program spans research in biotechnology, crop and plant physiology, and plant-breeding strategies. The major research thrusts within CSIRO are in

improving sugar yield, particularly through increased CCS, and improving sugar quality. Much of the CSIRO research is collaborative with the BSES and other research providers.

#### **CSIRO Entomology**

CSIRO Entomology is the largest single organisation in Australia conducting research into insects, related arthropods and terrestrial invertebrates. Core research activities include studies on the biology and control of Australian insect pests, biological control of weeds, taxonomy of insects and related arthropods, and biotechnology as it relates to insect science. Initially, collaboration with the sugarcane industry was mainly concerned with the taxonomy of insects attacking sugarcane while, in more recent times, the focus has been on biological control with pathogens.

In 1984, CSIRO Entomology started collaborating with BSES on the use of pathogens for control of sugarcane scarabs. Initially the work was mainly on the fungal pathogen *Metarbizium anisopliae* but has also involved work on insect pathogenic nematodes, as well as viral, bacterial and protozoan pathogens. The product BioCane™, jointly developed by BSES, CSIRO and BioCare Pty Ltd and funded by SRDC, was launched in 2000 and is a granular product containing viable spores of *M. anisopliae* for control of greyback canegrub.

Other studies have been concerned with identification of pheromones from sugarcane pests and studies on genetic resistance to mealybugs.

#### Department of Natural Resources

The Queensland Department of Natural Resources (DNR) focuses on natural resource management issues, particularly the planning, use and management of land, water, native forests and vegetation. The Department works in partnership with stakeholders, industries and other government departments.

DNR is an R&D party in the CRC for Sustainable Sugar Production. Policies encourage regional service delivery and community engagement. It has a major role in assessment of soil, water, native forest resources, land-cover, salinity and climate, and is the lead agency for ICM, Landcare and acid-sulfate soils. DNR plans and co-ordinates Queensland's fresh-water resources, carries out surface and ground-water assessments. and develops rural water-use efficiency and water-recycling strategies. Water allocation and management planning are key roles. It has an analytical centre, providing comprehensive range of chemical and physical tests. It also provides research on control and eradication of weed and vertebrate pests, and is the key agency for land valuations and titles.

## Department of Primary Industries

The Queensland Department of Primary Industries (DPI) is concerned with the expansion of food and fibre industries and the creation of jobs in rural and regional communities to maintain improvements in the quality of life for all Queenslanders.

DPI administers a range of financial assistance programs for primary producers. It also runs a range of farm management and rural leadership training and advice services. Details on all programs are available through the DPI Call Centre on telephone 132523, or by visiting the DPI's website at www.dpi.qld.gov.au.

The Agency for Food and Fibre Sciences within DPI delivers research, development, extension and information products to primary producers to improve efficiency and sustainability.

DPI's Policy Analysis and Industry Development (PAID) group implements the priorities and legislative reform packages of the Queensland Government in relation to the Primary Industries portfolio to promote effective, efficient and equitable Government intervention, thereby minimising impediments and ensuring internationally competitive and viable rural industry sectors and communities. For example, the PAID group

developed policies underlying the *Sugar Industry Act 1999* and its recent amendment. PAID also facilitates industry development through Industry Development Councils. PAID administers the Memorandum of Agreement through which DPI provides \$3.8 million per year to BSES.

DPI's Animal and Plant Health Service is involved in the surveillance and control of pests and diseases throughout Queensland. It is responsible for the implementation of the *Plant Protection Act 1989* and related legislation. It also has a role in emergency response management.

The Queensland Fisheries Service is responsible for the sustainable management of Queensland's fisheries resources. A particularly relevant service is compliance monitoring and education in relation to fisheries legislation. For example, it has developed a Fisheries Code of Practice dealing with on-farm management of canegrowers' activities that may impact on fish habitats.

The Office of Rural Communities (ORC) operates QGAP agencies ('one-stop' shops for all government services) and QDIAL (toll-free telephone service to government departments).

# Sugar Research and Development Corporation

The Sugar Research Council (SRC) was formed in 1987 as part of an initiative of the Australian Government to involve industry in the objectives and funding of R&D and to make R&D more efficient and effective in addressing industry needs. In 1990, SRC's functions were taken over by the Sugar Research and Development Corporation (SRDC) which was established under the *Primary Industries and Energy Research and Development Act 1989*.

SRDC does not do any research itself, but it funds the process of setting industry priorities, and funds priority R&D activities. It receives its income as a levy on growers and millers, which is matched dollar for dollar by the Commonwealth Government, up to 0.5% of the gross value of sugarcane production.

SRDC's mission is to foster internationally competitive and sustainable Australian sugar industry through directed funding to meet the research development needs of the sugar industry. SRDC's objectives, as stated in its current R&D Plan 1999-2004 are: to improve the competitive position and cost efficiency of the Australian sugar industry; to achieve sustainable use and sustainable management of the natural resource base of the sugar industry; to apply industry, scientific and community resources more effectively to R&D in the sugar industry; and to manage SRDC resources efficiently and to improve the accountability for expenditure on R&D for the sugar industry.

SRDC encourages collaboration among research organisations, and focuses on the strategic needs of the industry. In considering the needs and opportunities for R&D, SRDC takes into account industry priority issues and Australian Government priorities. It also takes into account the skills of the various research organisations competing for its funds. SRDC funds projects in eight program areas: Plant Improvement, Crop Management,

Crop Protection, Cane Harvest and Transport, Sugar Manufacture, Environmental and Natural Resource Management, Enhanced Marketability, and Whole-of-Industry Competitiveness.

SRDC is required under its legislation to produce a 5-year R&D Plan which outlines its corporate and statutory objectives, projected inputs, outputs, outcomes and strategies.

#### Sugar Research Institute

The Sugar Research Institute (SRI) is the principal R&D organisation serving the sugar milling industry in Australia. It was founded in 1949 and is located in Mackay. It receives funding from the sugar-milling sector, from SRDC, and from commercial contract R&D and consulting activities.

Its major research activities include basic and applied research on improving harvesting and transport, raw-sugar processing, the design of process equipment, cogeneration-related research, and analytical-method development.

Trading as Sugar Research International, SRI markets designs, products, and consulting and training services to the sugar industry globally.