

Ensuring the long-term sustainability of the sugar industry remains a key performance area of the South African Sugarcane Research Institute (SASRI), and hence the focus on developing and delivering services that meet the needs of all growers, is a key driver for all its research and development activities.

### A RESPONSIVE R&D PROGRAMME

SASRI serves the sugar industry by providing for all the agricultural research requirements related to the growing and production of sugarcane for improved profitability and sustainability. This is accomplished through a rigorous research, development and technology exchange programme that responds to industry sustainability and profitability needs and that is cognisant of global developments in sugarcane research. Research programmes at SASRI focus on the development and delivery of new and improved varieties; development of integrated management strategies that minimise the effects of pests and diseases on crop production; development of new and optimisation of existing crop management practices; and design and improvement of farming systems which, while accounting for the pressing economic, social and environmental issues faced by the industry, might impact positively on the sustainability of sugarcane production.

### **SPECIALISED ADVICE & EXTENSION**

Effective knowledge management facilitates technology development and knowledge transfer, and through the institute's Extension service, enables engagement with growers to encourage sustainable farming. This is further complemented by a range of specialist services that are specifically tailored for the industry's agricultural requirements to enable optimal farming practices. The well-established network of Extension Specialists that are based in the various regions of the sugar industry provides an effective mechanism for knowledge exchange amongst all growers including large-scale and small-scale growers. Through their well-developed Extension Venture Agreement with the KwaZulu-Natal Department of Agriculture, SASRI is also able to extend their reach to assist growers that have recently entered the industry.

SASRI has acknowledged that it is essential to develop a strong research-extension-grower partnership to ensure the adoption of new technology at a local level. SASRI has determined that different institutional arrangements are needed to transfer different types of technology to the different types of technology users. This is especially evident in the South African situation where there is an added complexity of different cultural practices and grower capabilities large-scale commercial growers, new entrants in the form of land reform growers and small-scale subsistence growers. Growers in these different categories are given access to a specialised extension service, which caters for their specific needs and exposes them to a wide variety of locally validated technologies to help them to increase productivity. Focus has been placed on the specific needs of the land reform sector to ensure a smooth transition and continued production. This is done through implementation of regular study group meetings, grower days, workshops and modular courses.

SASRI also plays a vital role in providing a range of services to the industry on a user-pays basis. These include specialist advice on growers' problems, fertiliser advice, pest and disease diagnostic services and certificate courses in sugarcane agriculture.

### **KNOWLEDGE EXCHANGE**

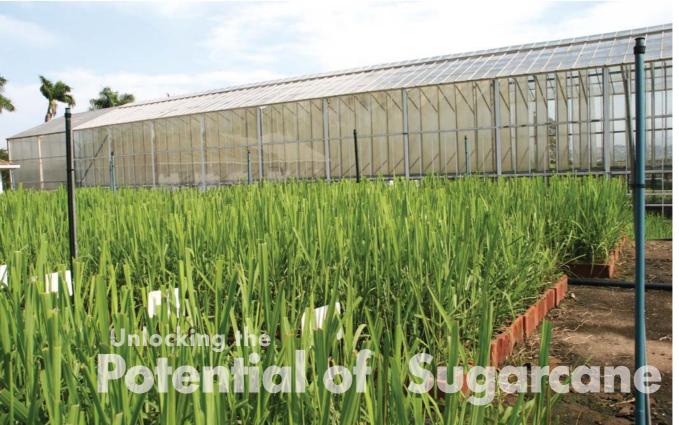
In order for SASRI's research to reach all growers, effective communication and support mechanisms are required that are tailored to meet the needs of the various grower enterprises, either large- or small-scale. Exchange takes places in direct response to grower requests or more formally through the Certificate courses in agriculture that are conducted by SASRI specialists several times a year.

In responding to requests from growers, Extension facilitates the production of sugarcane by promoting better management practices. They also assist in the



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their research outcomes at national and international symposia. Their expertise, leadership and depth of knowledge are frequently rewarded through awards, honorary appointments and scientific ratings.

### **CERTIFICATE COURSES**

Each year SASRI conducts two Senior and two Junior Certificate courses in Sugarcane Agriculture. These courses are designed to meet the needs of either new land reform beneficiaries or established sugarcane farmers over either a three-week or five-week period. Content of the courses covers the full range of agricultural practices and strives to provide both a theoretical and practical component.

Through its vast range of activities, research expertise, sound business acumen and strong knowledge base, SASRI's ultimate goal is to make a significant contribution to a sustainable and thriving South African sugarcane industry.



Dr Carolyn Baker Director South African Sugarcane Research Institute South African Sugar Association

adoption of new varieties and advise local communities, groups and organisations (e.g. Local Environment Committees, Grower Councils and Local Pest, Disease and Variety Control Committees).

## **AGRICULTURAL EXTENSION**

Apart from the services provided by Extension Specialists, SASRI endeavours to ensure that research outputs and advice are widely and frequently communicated. Through Extension, SASRI specialists regularly engage with growers, providing advice, conducting specialist investigations and delivering presentations on research outputs.

# **GROWER DAYS**

Grower days are held throughout the year to provide advice and insights to growers on a range of issues, e.g. farming operations, how to reduce input costs or better farming practices. Apart from these grower days, SASRI regularly hosts visitors at all its facilities. Some of the visitors include sugar industry representatives, government officials, student groups and scientists from South Africa and around the world.

### **TECHNICAL PUBLICATIONS**

The Link and the Ingede are technical newsletters in English and isiZulu, each published three times a year. These newsletters contain recommendations, updates and advice for efficient farming practices. In addition to these newsletters, regular articles containing SASRI

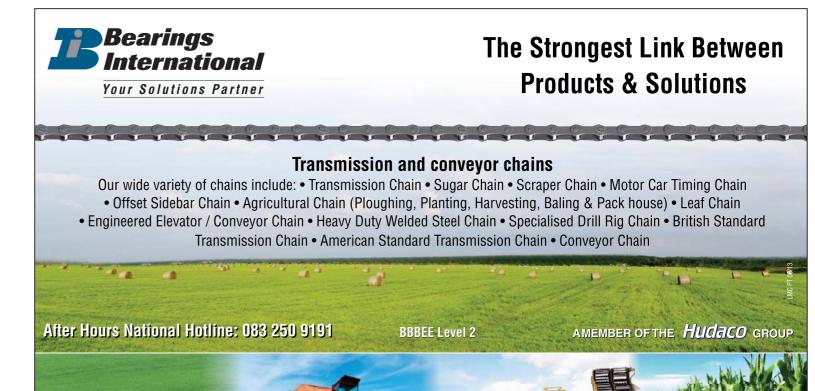
advice are printed in the Coastal Farmers Newsletter and the South African Sugar Journal. There are currently over 100 SASRI Information Sheets, each dealing with a different aspect of sugarcane agriculture. In addition, there are booklets and manuals on soils, weeds, herbicides, mechanisation and diseases - available in both hard copy and published annually as e-versions on the InfoPack CD. Further to this, SASRI regularly updates the SASA website with its most popular publications, as well as a list of publications that may be purchased. These publications can be obtained from the HH Dodds Library at SASRI, which is the only sugarcane agriculture library in South Africa. The library also maintains access to a number of journals and on-line references and is a valuable resource for researchers.

# **RADIO BROADCASTS**

Radio broadcasts have proven to be an effective means of delivering SASRI's message, especially to the small-scale grower sector. Programmes on topical issues are broadcast regularly throughout the year on seven different radio stations.

## **EXHIBITIONS AND SYMPOSIA**

SASRI participates in science, career and agricultural exhibitions which are aimed at informing and educating students and learners about possible careers in the field of agriculture and science. SASRI researchers present



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