

Services provided by SASRI to sugar-producing SADC countries

Introduction and background

THE SOUTH AFRICAN SUGARCANE RESEARCH INSTITUTE (SASRI) HAS A LONG HISTORY OF PROVIDING AGRICULTURAL TECHNOLOGICAL SERVICES TO OTHER SUGAR INDUSTRIES IN SADC COUNTRIES. SERVICE AGREEMENTS EXIST BETWEEN SASA AND THE SUGAR INDUSTRIES IN MALAWI, MOZAMBIQUE, SWAZILAND, TANZANIA, ZAMBIA AND ZIMBABWE. SOME OF THESE AGREEMENTS HAVE BEEN IN PLACE FOR MORE THAN THREE DECADES WHILE OTHERS ARE MORE RECENT, FOR EXAMPLE, THAT WITH ASSOCIAÇÃO DOS PRODUTORES DE AÇUCAR DE MOÇAMBIQUE (APAMO) WAS SIGNED IN 2001 AND THE MOST RECENT, WITH THE TANZANIA SUGAR PRODUCERS' ASSOCIATION (TSPA), WAS SIGNED IN JUNE 2004.

While the agreements vary slightly in detail, they all broadly provide similar access to (1) new varieties from the SASRI variety improvement programme, (2) a consultancy service that provides expert advice from SASRI researchers and information transfer specialists, and (3) information products, such as technical bulletins, technical newsletters and the Institute's Certificate Courses in Sugarcane Agriculture.

Varieties

Provision of new varieties is probably viewed as one of the most valuable services provided by SASRI that in the SADC context holds considerable significance, since production in all the mainland SADC industries is predominantly, or in some cases entirely, based on South African varieties developed at SASRI. This is largely attributable to the suitability of the 'N' varieties for African conditions.

New varieties from SASRI are made available to the agreement partners at least at the time of release



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in South Africa. However, the Zimbabwe agreement includes the provision of sugarcane 'fuzz' (true seed), based on which the Zimbabwean industry is able to conduct its own small selection programme under local conditions. In addition to importing released varieties, Malawi also has the capacity to import and test a number of advanced pre-release varieties from SASRI, for further selection and testing under their conditions.

The exchange of released varieties is a regular occurrence between the research institutes in South Africa and Mauritius to augment their respective breeding programmes. Further, SASRI provides a quarantine service to SADC industries to enable importation of other foreign varieties.

All agreement partners make payment for their South African varieties by means of a small levy per ton of sugar produced.

Consultancy services

Mainland SADC industries have access to advice by SASRI specialists on the full range of agricultural disciplines, at a user-pays rate. Many SASRI researchers have a close knowledge of production

conditions in the other industries and are in demand to provide advice and expert opinion. Most commonly requested topics include variety choice, disease and pest control, management of soils and nutrition, agricultural engineering and advice on irrigation.

Diagnostic services

Amongst SASRI's diagnostic services, the SASRI Fertiliser Advisory Service (FAS) is most widely used by all SADC industries. This service is an important aid to fine-tuning fertiliser application rates in order to optimise profitability. SASRI also provides a widely used diagnostic service for ratoon stunting disease (RSD), which was formerly widespread in all industries, is still common in some, and can severely reduce productivity.



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Irrigation tools

SASRI has developed an automatic crop modelling computer program called *My Canesim*, which can provide simple, realtime and field-specific irrigation advice via SMS to a grower's cellphone. While the SMS service is being offered on a limited scale to some small-scale growers, any grower in the industry can access the advice on SASRI's website. While there are plans to extend the SMS service to large-scale growers in Mpumalanga, there have already been requests for this service to be implemented in neighbouring countries.



Neighbouring countries have shown interest in implementing SASRI's irrigation computer program 'My Canesim'.

Information products



Technical publications that are made available free-of-charge in terms of the agreements with mainland SADC industries include the SASRI Annual Progress Report, bulletins on certain specialist topics (e.g. diseases, pests, weeds) and a wide range of up-to-date Information Sheets on almost every aspect of sugarcane agriculture. The Institute's advisory publication *The Link*, which is published quarterly, is also distributed to all estates. Certain technical bulletins (e.g. soils) are priced to recover costs.

In addition, SASRI holds annual Certificate Courses in Sugarcane Agriculture at junior and senior levels. The courses cover all aspects of sugarcane husbandry, and are highly sought after by managers, staff and growers from all regions within the South African sugar industry as well as from many countries in Southern Africa. ✓

Article submitted by the South African Sugarcane Research Institute