Growing the Sugar Industry in South Africa

Document 1: Overview of the Sugar Industry in South Africa: Contribution to Social and Economic Development and Contentious Issues

30 January 2013

The reporting on the outcome of the study consists of a number of technical reports and a final Management Report as listed below. This Report corresponds to the report **Document 1** below:

- Management Report: Lessons, Justifications and Challenges Guidelines for Decision Making.
- Document 1: Overview of the Sugar Industry: Contribution to Social and Economic Development and Contentious Issues.
- o Document 2: Comparative Advantage Analysis of the Sugar Industry.
- o Document 3: Legislative Environment of the Sugar Industry.
- Document 4: Evaluation of the Viability of the Sugar Industry: A Cost Benefit Analysis and Macroeconomic Impact analysis.
- Document 5: Investigation and Evaluation of Alternative Uses and Products: A Cost Benefit and Macro-economic Impact Analysis.



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Acronyms

ACP-EU Africa Caribbean Pacific - European Union

ADA Agri-business Development Agency
AGOA African Growth and Opportunity Act

Agri-SETA Agricultural Sector Education and Training Authority

Annex VII 2004 Protocol on Protection of the Sugar Trade within SACU and SADC

BEE Black Economic Empowerment
BOTT Board on Tariffs and Trade

CEPGL Economic Community of Central African Lakes Countries

CET Common External Tariff

CHIETA Chemical Industries Education and Training Authority
COMESA Common Market for Eastern and Southern Africa

CTS Cane Testing Service
DoP Division of Proceeds

DRC Democratic Republic of Congo
DTI Department of Trade and Industry

EAC East African Community

ECCAS Economic Community of Central African States

EPA Economic Partnership Agreements

ESETA Energy Sector Education and Training Authority

FTA Free Trade Area

GDA Grower Development Account

GDP Gross Domestic Product

IGAD Inter Governmental Authority for Development

ITC International Trade Centre

ISO International Standards Organisation

KZN Kwazulu-Natal

LIMS Laboratory Information Management System

MacMap Market Access Map

MERCETA Manufacturing, Engineering and Related Services Sector Education and

Training Authority

REC Regional Economic Community

RISDP Regional Indicative Strategic Development Plan

RSA Republic of South Africa RV-price Recoverable Value Price

SACGA South African Cane Growers Association

SACU South Africa Customs Union

SADC Southern Africa Development Community
SAMA South African Millers Association Limited

SASA South African Sugar Association

SASRI South African Sugar Research Institute

SMRI Sugar Milling Research Institute

STC Shukela Training Centre

SITFE Sugar Industry Trust Fund for Education

TCS Technical Committee on Sugar

Tri-FTA Tripartite Free Trade Area
TWG Technical Working Group
TSB Transvaal Sugar Board
WTO World Trade Organisation
WWF World Wildlife Fund

1 Introduction

1.1 Background

The sugar supply chain has two very distinct activities, the sugarcane production and the sugar milling sections. It is a symbiotic relationship, since the one depends on the other. The miller cannot exist without a supply of sugarcane, while the cane producer needs a miller. Around this symbiotic relationship a structure exists, involving both the sugarcane farmers and the millers and which supports research, extension services, and sugar marketing.

A number of changes to the system have occurred over the years regarding the arrangements for the transport of sugarcane and the A and B quota production system that was in place, which were removed in the early 1990's. Since the mid 1990's, marketing arrangements with SACU and SADC, together with the expansion of the South African Milling Groups into neighbouring countries, have added elements of uncertainty to the industry, especially to cane production. However, the broader structure within which the industry operates has remained in place relatively unchanged.

The purpose of this chapter is to provide the reader with an overview of the industry without commenting on or evaluating any policies or arrangements. The evaluation process is the subject of later sections of the study and is reported on in the relevant chapters of the report.

1.2 Structure of the Report

The following chapters are included in the document:

- Chapter 1 Introduction
- Chapter 2 Sugar Industry Policy and Institutional Framework
- Chapter 3 The Sugar Industry's Current Contribution to Social, Economic and Environmental Development
- Chapter 4 Contentious Marketing Issues
- Chapter 5 Closing Remarks

2 Sugar Industry Policy and Institutional Framework

2.1 Policy Framework

The sugar industry operates within an existing institutional environment which has developed over time and has evolutionary adapted to changes in the regulatory, political and marketing environment. In the next number of sections the existing policy framework and structures within the framework are presented.

2.1.1 Regulation of the South African Sugar Industry

The South African sugar industry is regulated within the wider context of; inter alia, the following legislation, and agreements:

- o Agricultural Act, No. 70 of 1970.
- o The Marketing of Agricultural Products Act, No. 47 of 1996.
- Sugar Act No 9of 1978 as amended
- Sugar Industry Agreement of 2000.
- o ANNEX VII of the SADC Protocol on Trade as amended.
- The SASA Constitution.

South Africa is a member of two regional organisations, the Southern African Customs Union (SACU) and the Southern African Development Community (SADC). The SACU is essentially South Africa and its immediate neighbours (Botswana, Lesotho, Namibia and Swaziland), whereas SADC is comprised of 15 member states. The SADC Member States currently are: Angola, Botswana, the Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe.

Regional protocols currently affecting the industry or under consideration include the following:

- Southern African Customs Union Agreement (SACU)
- Southern Africa Development Community (SADC) Protocol on Trade, Annex
 VII (the Sugar Co-operation Agreement).
- o Proposed SADC-COMESA-EAC Tripartite Free Trade Area.
- o Envisaged SADC Customs Union.

2.1.2 The Southern African Customs Union Agreement

South Africa and Swaziland are the only sugar producing countries in SACU and are both surplus sugar producers. Although Swaziland and South Africa operate in the same (SACU) market the premium (preferential) market for SA producers is limited to domestic SACU market (excluding the Swaziland domestic market), and a small preferential quota to the US market. Access opportunities to premium markets for Swaziland include its domestic market, EU and US markets, the SACU market and COMESA. SACU maintains an import tariff on sugar entering the Customs Union.

2.1.2.1 Disparity in Market Regulation in SACU

As is the case in all sugar-producing countries in the world, both the South African and Swaziland sugar industries are regulated. Although the primary objective of the Customs Union arrangement is to establish free trade between its members in all products, sugar trade in SACU has to date not been free, due to the different regulatory approaches followed by the Swaziland and South African governments with regard to their respective industries.

The South African Sugar industry is regulated through the provisions of the Sugar Act of 1978 and the Sugar Industry Agreement, 2000, which inter alia empowers SASA to export bulk raw sugar. Equitable exposure to the world market is established by way of a quarterly redistribution of local market proceeds. The Swaziland sugar industry is regulated through the provisions of the 1967 Sugar Act which inter alia empowers SSA to be a statutory monopoly marketing body, solely responsible for the marketing of all sugar, controlling both the domestic and export markets. The Swaziland Government maintains an import permit system that restricts imports into Swaziland. Although Swaziland is a member of SACU, SA sugar access to Swaziland is restricted through import licensing. The price of sugar in Swaziland is controlled under the Price Control Order, 1973 that provides for the fixing of maximum prices for a number of products, including sugar. Sugarcane growing is controlled through a quota issued by the Sugar Industry Quota Board. A sugar export levy is levied on all Swaziland sugar exports except to its SACU partner states. The Swaziland Sugar Association is in addition a state owned enterprise.

2.1.3 The South African Development Community Protocol on Trade

For the SADC countries, trade policy is guided by the rules and disciplines of relevant regional (COMESA, EAC, SACU, ACP-EU EPA, AGOA) and multilateral trade arrangements (WTO) to which they are members, as well as bilateral agreements and autonomous structural adjustment programmes supported by the IMF and World Bank.

Heads of State and Government, at an August 2004 Summit held in the Republic of Tanzania, adopted the SADC Regional Indicative Strategic Development Plan (RISDP) which moved the SADC economic integration vision beyond the level of an FTA to successive deeper stages of regional integration. The deeper integration envisaged included the establishment of a Customs Union by 2010, a Common Market by 2015 and a Monetary Union by 2016. The Member States, at the time, accepted that achieving regional economic integration in Southern Africa requires them to put their full support behind SADC to act on behalf of all Southern African States for their common prosperity, peace and unity.

Under the auspices of a Ministerial Task Force, the Technical Working Group (TWG) on a SADC Common External Tariff (CET) put together a Terms of Reference for a study on "An Optimum Option for a SADC Customs Union Common External Tariff". Two of the main objectives of the study were to identify policies that underpin the tariff structures of SADC Member States and examine options and to recommend an optimal Common External Tariff (CET) structure for the envisaged SADC Customs Union.

The study concluded that the tariff regimes of the SADC member states are varied, with regime structures of divergent numbers of tariff bands. This contrasting picture demonstrates that the fashioning of a CET for SADC needs to be innovative enough to accommodate the interest of the majority, which would in turn minimize steep changes in the short term. The study therefore recommends that Member States should recognize that achieving regional economic integration in Southern Africa requires them to put their full support behind SADC to act on behalf of all Southern African States for their common

prosperity, peace and unity. Of the four options developed, the study recommended the most suitable one based on the following reasons:

- It takes into account the wider variation of tariff rates in SADC;
- It identifies tariff rates clusters, within the region, which are informed sector growth processes;
- It promotes free circulation of goods, as it is more inclusive, thus it discourages creation of sensitive product lists.

Efforts to form a Customs Union have however proceeded slower than expected. As of late 2012, preparatory work is still being undertaken. A number of members are in support of rapidly moving towards a Customs Union but South Africa's position is that deeper integration in SADC cannot only be market integration but it needs to include infrastructure development, and industrial development and that implementation of a Customs Union is therefore premature.

2.1.4 The sugar industry and the proposed SADC - COMESA - EAC Tripartite FTA

Africa is unique in the large number of countries within one continent (over fifty) and in spite of, or perhaps because of this, efforts to achieve some form of economic and eventual political unity as a continent have been on-going for decades.

These aspirations have recently taken a significant step forward with the announcement of a proposed "Grand Free Trade Area of Eastern and Southern Africa", commonly now referred to as the proposed "Tripartite Free Trade Area". This FTA would be formed by merging the existing FTAs of three of the region's Regional Economic Communities (RECs), namely SADC with its 15 members, the Common Market for Eastern and Southern Africa (COMESA) ¹ with its 19 members and the East African Community (EAC) ² with its five members. In many cases memberships of the three blocs overlap.

A FTA is an economic area where the participating states have agreed to reduce (liberalise) their internal tariffs with each other whilst at the same time each maintaining their own external tariffs with any trading partners from outside the FTA. For example, Zambia and Malawi are lowering their tariffs between each other in terms of the SADC Protocol on Trade, but they both have their own separate tariffs or even trade agreements for non-SADC countries. For an FTA to be recognised by the World Trade Organisation 'substantially all trade' must be liberalised, and the figure attached to this is generally between 85 and 95% of internal trade. The Tripartite FTA would therefore need to implement a progressive phasing down of internal tariffs between all its members to meet this requirement.

¹ The COMESA members currently are: Comoros, Djibouti, Egypt, Ethiopia, Eritrea, Kenya, Uganda, Rwanda, Burundi, DRC, Madagascar, Malawi, Mauritius, Seychelles, Swaziland, Libya, Sudan, Zambia and Zimbabwe.

² The EAC members currently are: Tanzania, Kenya, Uganda, Rwanda and Burundi.

The FTAs of COMESA, EAC and SADC cover 22 of the 26 tripartite countries; except Angola, DR Congo, Ethiopia and Eritrea, which do not at present, participate in any of the three FTAs. This reach of the three FTAs is an important factor. It lays the basis for consolidating the respective FTAs into the new Tripartite FTA (Draft Report on Establishing the Tripartite Free Trade Area: 2009).

2.1.4.1 Status of the Tripartite Regional Economic Communities

Since the envisaged Tripartite FTA is to be formed by three of the region's Regional Economic Communities (RECs), the current status of the RECs is as follows:

- COMESA and the East African Community (EAC) operate as Customs Unions. COMESA started in 1982 with a preferential trade arrangement limited to 232 products. A FTA was achieved in 2000 and trade is now largely duty-free amongst members. A variable geometry Customs Union, where COMESA members choose to join the Union rather than it applying automatically to all states, was launched in 2009.
- An East African Customs Union was launched in 2005 and duty-free trade amongst EAC members was achieved in January 2010, and negotiations towards a Common Market have commenced.
- The SADC Trade Protocol came into effect in 2001 and 85% duty-free trading was reached in 2008. The remaining tariffs will be eliminated by 2012 (2015 for Mozambique).
- Angola has not yet made an offer or implemented the SADC Trade Protocol, but it is expected that it will accede to the proposed tripartite FTA (Tri-FTA).
- The DRC and Seychelles, even though members of SADC are not party to the SADC Trade Protocol. They are members of COMESA, though.

2.1.4.2 Tripartite FTA Negotiations

The first Tripartite Summit took place in Kampala, Uganda, on 22 October 2008, with a view for Heads of State and Government of the three RECs to give guidance on how to advance cooperation and coordination under the Tri-partite arrangement. Four key areas of cooperation were called for:

- Harmonization of trade regimes;
- Free movement of business persons;
- Joint implementation of regional infrastructure projects and programmes;
 and
- o Legal and institutional arrangements for regional cooperation.

The Summit agreed on the establishment of an FTA with the ultimate goal of establishing a customs union involving all Tripartite Member States. The Summit directed that a study be undertaken to develop a roadmap for the process that would take into account the variable

geography realities, formulate a legal and institutional framework to underpin the FTA, and to make proposals to facilitate the movement of business persons across the three REC's.

The Tripartite FTA was foreseen to take place in four phases:

- Preparatory phase (November 2009 June 2010)
- Negotiation phase (July 2010 June 2011).
- Launch of the pre-implementation transitional phase (July 2011 December 2011).
- Implementation of the FTA (January 2012).

The Second Tripartite Summit took place in Johannesburg in June 2011. The Summit launched the Free Trade Area negotiations. The Heads of State signed a Declaration, which:

- Committed the Tripartite Members to adopt a developmental integration approach built on three pillars of industrial development, infrastructure development and market integration;
- Directed that a programme of work be prepared on the industrial development pillar;
- Noted progress made, and encouraged further work, on the programmes on the infrastructure pillar;
- Noted that the negotiations shall be Regional Economic Community and/or Member and Partner State driven and shall be in two phases.
 - (a) The first phase will be for negotiations on trade in goods. This will be concluded within 3 years, including a 1 year preparatory phase. Movement of business persons will also be negotiated during the first phase through a separate track.
 - (b) The second phase will cover the built-in agenda in services and trade related areas:
- Agreed on the principles for the negotiations; a Roadmap; and the implementation of the outcomes as well as the institutional framework for the negotiations.

The timeline of three years for trade negotiations may be too ambitious if the timeline involved in the negotiation of the SADC Trade Protocol is taken as an example.

2.1.4.3 Intra-Tri-Partite FTA Trade and Trade Liberalisation

Intra-tripartite exports and imports stood at US\$27.5 billion and US\$32.3 billion, respectively, in 2008. These numbers grew by 256 % and 251 %, respectively, since 2000. Of the 26 tripartite countries, six registered net positive intra-tripartite trade: Angola, Botswana, Kenya, Egypt, Swaziland and South Africa. The market shares of some countries are only marginally above zero. There are, therefore, considerably uneven market shares, which might require safeguards in the agreement.

In 2008 South Africa exported goods to the value of \$10.1 billion to tripartite countries, and imported goods worth \$5.3 billion from them³. South Africa leads with both the highest export market share (35 %) and import share (15 %).

The key intra-tripartite trade products cover a range of processed and non-processed products such as tractors, copper ore and concentrates, light oils, tea, refined copper, Portland cement, nickel and tobacco.

The Tripartite Coordinating Mechanism's Draft Report on Establishing the Tripartite Free Trade Area, published in November 2009, notes that as 22 of the 26 tripartite countries⁴ already participate in at least one of the three trade arrangements, momentum exists to establish a tripartite FTA without delay. The report states that the principle of variable geometry should apply, whereby allowing countries to implement the new FTA at varying speeds. It states that the FTA should nonetheless lock in, consolidate and improve on the existing trade liberalisation processes in the three REC's. The study therefore recommends that countries implementing existing FTAs within their respective RECs will lock-in their existing FTA status into the new arrangement and extend such preferences to all participating Member States..

This means that the existing trade liberalisation in the three RECs would be recognised, and that each member state would extend the treatment of products of its own REC, also to those of the other REC's. This approach plans to combine the three trading arrangements into a single duty free, quota free and exemption free regime. The report acknowledges that it might be necessary to allow for a tariff phase-down over a specified period beyond 2012, for a limited number of identified sensitive products. Member states have since stated that the report will merely form the basis for negotiation, and that all modalities will be subject to negotiation. The Draft Report recognised that trade in sugar in SADC is governed by a separate Annexure (Annex VII) under the SADC Protocol on Trade.

2.1.5 The Southern African Development Community Sugar Cooperation Agreement

As stated above, SADC is currently in the final stages of implementing a Free Trade Area (FTA). However, with regard to sugar, the member states noted at the time of the creation of the relevant SADC Protocol on Trade that the world sugar market is highly distorted and that the world price for sugar is a dumped or subsidised price resulting in the continuing need for most sugar producing countries to impose tariff and non-tariff barriers against the free importation of sugar in order to protect their domestic industries. The conclusion reached was that for as long as the world sugar market remains highly distorted, sugar would be a product requiring special dispensation within the framework of the Protocol on Trade so that no sugar industry within SADC would suffer injury. An Annex (Annex VII) to the Trade Protocol was therefore created to regulate the sugar trade within SADC. The Annex, also referred to as the SADC Sugar Co-operation Agreement, deals with the promotion of production and consumption; maintenance of an orderly regional market;

Draft Report on Establishing the Tripartite Free Trade Area

⁴ Four countries are not participating in any of the three regional trading arrangements: Angola, DRC, Ethiopia and Eritrea.

harmonisation of sugar policies; investment; competitiveness; sharing of information, research and training; development of small and medium sugar enterprises and employment creation.

The main objectives of the SADC Sugar Co-operation Agreement are summarised as follows:

- To promote, within the region, production and consumption of sugar and sugar-containing products according to fair trading conditions and an orderly regional market in sugar for the survival of the sugar industries in all sugar producing member states, in anticipation of freer global trade;
- To create a stable climate for investment, leading to growth and development of sugar industries in the member states;
- To improve the competitiveness of the sugar-producing member states in the world market;
- To facilitate the sharing of information, research and training with a view to improve the efficiency of growers, millers and refiners of sugar in member states;
- o To facilitate the development of small and medium sugar enterprises; and
- To create stable market conditions in the member states so as to encourage the rehabilitation and development of all sugar industries with a view of facilitating direct foreign investment and the creation of employment opportunities.

2.1.5.1 Current and Potential Sugar Trade Flows in the Tripartite FTA

The total value of sugar exports (raw cane sugar excluding added flavouring or colouring) in the tripartite area is believed to be close to USD\$958 million. It can be seen from Table 1 below that the broader non-SADC region offers both opportunities and challenges for SADC sugar producers.

According to International Sugar Organisation 2012 statistics most import competition for African producers comes from India and Brazil, and South Africa exported sugar to a number of non-SADC states (Kenya, Rwanda, Sudan, Uganda). Such exports were higher prior to the 2009/10 to 2010/11 season drought experienced by the industry. Given that the import market for sugar comprises around 2.4 million tons in non-SADC states, and that the Tri-FTA region overall is a net-importer it can be seen that potential value exists for South African producers. Within the non-SADC region, the net-import figures are significantly higher.

The expansion of the EU imports under the reform of the EU sugar regime has also led to increased potential for swaps in the region to supply the EU. South Africa as a current non-beneficiary of EU access could be ideally suited to take advantage of this if the final modalities of the Tri-FTA facilitate this.

The challenge for the Federation of SADC Sugar Producers will be to ensure that any negotiations do not undermine the best elements of the current Annex VII to the SADC

trade agreement, and yet at the same time creating new opportunities for SADC sugar producers under any Tripartite FTA.

| Country | REC | MFN Applied Tariff | Production | Imports \$ | Consumption# | Exports |
|-----------------------------|-------------|------------------------------------|------------|---------------------|--------------|-----------|
| Angola* | SADC | 2% raw, 5% refined | 0 | 230,281 | 275,000 | 0 |
| Botswana | SADC | 0% raw** 0% refined | 0 | 50,164 | 53,000 | 0 |
| Burundi | EAC/COMESA | 15% raw 30% refined | 24,000 | 14,571 | 33,000 | 0 |
| Comoros | COMESA | 0% raw 0% refined | 0 | 10,021 | 10,000 | 0 |
| Djibouti | COMESA | 20% raw 0% refined | 0 | 64,016 | 17,000 | 45,000 |
| DRC* | SADC/COMESA | 20% raw 20% refined | 85,000 | 82,882 | 150,000 | 0 |
| Egypt | COMESA | 2% raw 10% refined | 1,750,000 | 1,059,984 | 2,750,000 | 104,019 |
| Eritrea* | COMESA | 2% raw 2% refined | 0 | 76,392 | 35,000 | 45,000 |
| Ethiopia* | COMESA | 5% raw 5% refined | 320,000 | 801 | 415,000 | 28,162 |
| Kenya | EAC/COMESA | 35% raw 100% refined or \$200 /Ton | 595,901 | 184,530 | 828,323 | 1,915 |
| Lesotho | SADC | 0% raw** 0% refined | 0 | 19,000 | 22,000 | 0 |
| Libya | COMESA | 0% raw 0% refined | 0 | 275,275 | 285,000 | 0 |
| Madagascar | SADC/COMESA | 5% raw 5% refined | 25,000 | 146,076 | 150,000 | 28,125 |
| Malawi | SADC/COMESA | 25% raw 25% refined | 300,000 | 0 | 190,000 | 117,904 |
| Mauritius | SADC/COMESA | 0% raw 0% refined | 497,548 | 36,107 | 40,454 | 366,515 |
| Mozambique | SADC | 7.5% raw 7.5% refined | 252,459 | 3,568 | 185,420 | 122,000 |
| Namibia | SADC | 0% raw** 0% refined | 0 | 58,000 ^e | 55,000 | 0 |
| Rwanda | EAC/COMESA | 30% raw 30% refined | 10,000 | 11,817 | 21,500 | 0 |
| Seychelles | SADC/COMESA | 0% raw 0% refined | 0 | 4,600 ^e | 5,250e | 0 |
| South Africa | SADC | 0% raw** 0% refined | 2,330,205 | 407,315 | 1,850,379 | 905,604 |
| Sudan | COMESA | 0% raw 10% refined | 819,028 | 346,935 | 1,115,174 | 30,048 |
| Swaziland | SADC/COMESA | 0% raw** 0% refined | 640,079 | 0 | 55,000 | 562,191 |
| Tanzania | EAC/SADC | 35% raw 100% refined or \$200 /Ton | 269,232 | 100,168 | 445,354 | 0 |
| Uganda | EAC/COMESA | 35% raw 100% refined or \$200 /Ton | 312,393 | 142,820 | 345,592 | 87,377 |
| Zambia | SADC/COMESA | 25% raw 25% refined | 322,967 | 0 | 134,562 | 144,044 |
| Zimbabwe | SADC/COMESA | 20% raw 20% refined | 260,685 | 39,080 | 186,688 | 149,003 |
| Total excluding SADC states | 11 | - | 3,831,322 | 2,187,162 | 5,855,589 | 341,521 |
| Total including SADC states | 26 | - | 8,814,497 | 3,364,403 | 9,653,696 | 2,736,907 |

Table 1: Trade bloc membership (2009) and global sugar trade (2009), COMESA, EAC and SADC states, metric tons raw value

Sources: Draft Report on Establishing the Tripartite Free Trade Area, published by The Tripartite Coordination Mechanism in November 2009; ITC MacMap and ISO (August 2010, tons raw value)

Notes:

Kenya and Uganda are additional members of IGAD (the Inter-Governmental Authority for Development), and Angola, Democratic Republic of the Congo, Rwanda and Burundi are also members of ECCAS (the Economic Community of Central African States). Furthermore, Rwanda, Burundi and the Democratic Republic of the Congo are members of The Economic Community of the Great Lakes Countries (CEPGL), recently revived in 2004.

- * Angola, DR Congo, Ethiopia and Eritrea do not currently participate in any of the three FTAs.
- ** All the SACU states use a formula duty for sugar, currently delivering 0% duty. e Estimate

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2.1.6 Time Frames for Establishing the Tripartite FTA

Originally when negotiating the Tripartite FTA it was foreseen to take place in four phases:

- Preparatory phase (November 2009 June 2010)
- o Negotiation phase (July 2010 June 2011).
- Launch of the pre-implementation transitional phase (July 2011 December 2011).
- o Implementation of the FTA (January 2012).

In July 2011 it was agreed at the 2nd Tripartite Summit that the trade negotiations will be concluded within three years, i.e. by July 2014. This may be too ambitious if the timeline involved in the negotiation of the SADC Trade Protocol is taken as an example.

2.1.6.1 Consideration of Annex VII within a Broader Tripartite Arrangement

Annex VII represents the agreement amongst the contracting parties of SADC involved in the Sugar Industry. The agreement addresses the regional promotion of the industry, through market liberalisation; access to the SACU market; quota access to non-SACU SADC sugar producing countries; co-operation in common interest areas; and implementation aspects.

The current Annex VII has been implemented for a number of years, and provides a number of provisions which could be replicated in a Tripartite FTA-wider arrangement. However, given the distorted nature of the world sugar market, it would be necessary to provide temporary measures to insulate sugar producing industries, even within the larger Tripartite FTA area, from the destabilising effects of the distorted global market. Also in this regard, to harmonise sugar policies and regulate the sugar trade within this wider region until world trade conditions permit freer trade in sugar. Elements of Annex VII are therefore well placed to inform negotiations on a Tripartite FTA-wide sugar trade policy.

A key objective of the South African sugar industry would be to establish preferential access for sugar within the Tri-FTA region, yet at the same time, preventing or limiting any sugar imports to SACU. The SACU market is managed as a single market structure by the members of the customs union. South Africa and Swaziland as the only two sugar producers in SACU are involved in discussions around policy harmonisation within the SACU sugar sector

South Africa would be most negatively affected in a FTA as it markets around 70% of the crop on average in the SACU market while the rest is exported and sold on the world market, except for 30 000 tons (around 1,5% of production) that are sold under preferential quota in the USA. Swaziland sugar production varies between 600 000 and 670 000 tons of which on average 320 000 tons, nearly 50%, is sold at present on the SACU market, and the balance is sold on preferential quota allocations with only less than 1% occasionally sold on the loss making world market. The remaining Tripartite region producer's all enjoy Duty Free Quota Free Access to the EU market and (for COMESA members) duty free access to the COMESA market. This means that South Africa's competitors in a Tripartite FTA would be able to cross-subsidise their sales into South Africa using the revenues from their other preferential access market sales.

As the Tripartite region is a net importer of sugar, it could be a goal of the Tri-FTA negotiations with regard to sugar that sugar producers within the region should benefit from the creation of the FTA. An arrangement could therefore be established that will allow and facilitate this, whilst at the same time preventing destructive market competition in world sugar prices.

2.7 Institutional Arrangements

In this section the institutional arrangements in the South African sugar industry are presented and discussed. Broadly speaking, the industry consists of a Primary and Secondary section, with the primary section the sugarcane production and the sugar milling industry the secondary section. The primary production sector is represented by the South African Cane Growers' Association (SACGA) and the millers by the South African Millers Association (SASMA). The two organisations cooperate in a partnership in and with the South African Sugar Association.

2.7.1 SA Sugar Association

The Council of the South African Sugar Association administers the partnership on behalf of the South African Cane Growers' Association and the South African Sugar Millers' Association. As equal partners, each member elects eleven councillors on the SA Sugar Association Council. The Chairmanship and Vice-Chairmanship of the Council usually alternates every two years between a grower and a miller.

The South African Sugar Association (SASA) is an autonomous organisation and operates free from government control. In terms of the Sugar Act and Sugar Industry Agreement, statutory powers of self-governance are granted to the sugar industry.

The South African Sugar Association's administrative and industrial activities and organizations are financed from the proceeds of the sale of local and export sugars. The 2010/2011 budget is presented in the following text box:

The 2010/2011 budget of SASA was R259 million, with the following sub-sectors:

- Services R83 million
- Finance R20 million
- Trading R39 million
- Dev. Grants R57 million
- Other R60 million

The structure of the SA Sugar Association is illustrated in the diagram below. The growers and millers of the sugar industry are respectively structured in 13 Local Growers Councils, organised into the SA Cane Growers' Association; and 6 Milling Companies, organised into the SA Sugar Millers' Association. The South African Sugar Association oversees and administers the partnership in this organization structure.

| ORGANISATION OF THE SOUTH AFRICAN SUGAR INDUSTRY | | | | | | |
|-------------------------------------------------------|--|---------------------|------------------|----------|--|--|
| GROWERS | | | MILLER | S | | |
| 13 LOCAL GROWERS COUNCILS | | 6 MILLING COMPANIES | | | | |
| SA CANE GROWERS' ASSOCIATION | | SA ASSOC | SUGAR SIATION | MILLERS' | | |
| SOUTH AFRICAN SUGAR ASSOCIATION COUNCIL | | | | | | |
| Comprising Representatives of the Growers and Millers | | | | | | |

Diagram 1: Structure of the South African Sugar Industry

A number of programmes and support structures are maintained by SASA on behalf of the millers and cane growers and are discussed below.

2.7.1.1 Functional Support Structures of the South African Sugar Association

2.7.1.1.1 Industry Affairs

Administrating and facilitating adherence to the Sugar Act, the Sugar Industry Agreement and the SASA Constitution, is the responsibility of SASA's Industry Affairs Division. Joint decision-making on all matters affecting the partnership and that fall within the scope of the legislation and agreements governing the industry is undertaken by Grower and Miller representatives through their participation in the meetings of the SASA Council and its Committees. The Industry Affairs Division is responsible for the administration of this important and complex decision-making process. The Division's key performance areas

include Partnership Support and Secretariat services, and responsibility for the Division of Proceeds, Grower Administration and Umthombo Agricultural Finance. Umthombo Agricultural Finance provides savings facilities and administers loans for small-scale growers in the KwaZulu-Natal, Eastern Cape and Mpumalanga provinces in South Africa.

2.7.1.1.2 South African Sugarcane Research Institute

The SA Sugarcane Research Institute (SASRI) is the leading sugarcane agricultural research institute in Africa. SASRI is world-renowned for its research into the development of new sugarcane varieties, and improved crop management and farming systems that enhance profitability. Effective delivery of new knowledge and technology make a significant contribution to the sustainability of the industry. Research at SASRI is clustered within four multi- disciplinary programmes:

- Variety Improvement seeks to breed and select high yielding, pest and disease resistant varieties that meet industry requirements, using both conventional breeding and modern molecular technologies. Improved efficiency in variety production is a key focus area.
- Crop Protection research is aimed at minimizing the impact of weeds, pests and diseases on crop yields in environmentally sustainable ways. Emphasis is placed on the integrated use of management practices on bio security issues through the development of proactive counter measures and threat-specific incursion plans.
- The Crop Performance and Management programme focuses on enabling production of high quality sugarcane through optimal choice of varieties, appropriate use of ripeness, herbicides and fertilizers for enhanced soil sustainability, as well as efficient use of water and improved harvesting practices.
- Systems Design and Optimisation programme is directed towards investigating and developing innovative systems that optimise crop production through modelling, technology design and a farming systems approach. Development of appropriate technology transfer tools and practices is recognized as fundamental to improved adoption of research advice and sustainable sugarcane production.

2.7.1.1.3 Shukela Training Centre (STC)

With the slogan 'Training today's people for South Africa's tomorrow', the Shukela Training Centre is the preferred provider of agricultural and engineering training to the sugar industry.

The Agricultural Training department focuses on the sugar industry and provides skills based training to all sugarcane farmers. The courses take place on the farms and the training has a

high practical component and can be of benefit to new entrants into sugarcane growing, established commercial and small-scale growers and farm workers.

Engineering training is carried out at the Shukela Training Centre based in Mount Edgecombe, where accommodation is available for the learners. The Centre proudly boasts training equipment that spans the progress of technology. Learners are trained in Electrical, Electronics, Fitting, Millwright, Refrigeration and Welding and all departments are accredited to qualify learners to artisan status either by Learnership or Apprenticeship. The Centre is accredited with the relevant Sectoral Education and Training Authorities for training and trade test provision and has the status of Institute of Occupational Excellence conferred by the AgriSETA.

2.7.1.1.4 Finance

SASA's Finance division provides Management Accounting, Financial Accounting, Taxation, Corporate Governance, Treasury, Payroll, Procurement, Facilities Management and associated administration services to SASA. It is also responsible for monthly and annual financial reporting to the industry. The Treasury function includes the obtaining of all funds for industry requirements, for example carry-over stock and foreign exchange risk management.

Through Auto lab, the division provides expert support and development to the Sugar Industry Laboratory Information Management Systems (LIMS) utilised by all sugar mills within South Africa. LIMS is designed to manage growers' estimates and allocations, and provides the source data for determining payments for sugar deliveries by growers. Auto lab also develops and maintains the systems that track sugarcane through the milling process for the purpose of sampling and testing by the mills and Cane Testing Service (CTS) laboratories.

The Information Systems department provides technical support to computer users in the SASA divisions. The department is responsible for the design, implementation and maintenance of all computer network services. The weekly processing of the Industrial Systems that determine cane payment amounts for growers who have delivered sugarcane to the mills is also performed by the department.

2.7.1.1.5 Human Resources

As a provider of specialist services, SASA's performance and service levels are highly reliant upon the performance and service of SASA's employees. The diversity of the skills SASA employs, ranging from high-level specialists to unionized industrial and agricultural labour, and the wide geographical spread of our operations, makes the effective management of people, their knowledge and their performance particularly important.

In support of this need, the Human Resources division provides a comprehensive range of services to managers and employees in SASA, all of which aim to resource the organization

with highly competent and effective people who are committed to serving the best interests of the South African sugar industry.

2.7.1.1.6 External Affairs

This division performs in a range of areas that require policy analysis and specialist external communication skills, with a focus on international and regional trade issues, publications, communications, renewable energy, environment, land reform, development and nutrition. The Division also administers the Sugar Industry Trust Fund for Education.

The External Affairs Division is responsible for the building of governmental relationships and the monitoring of local, regional and global trade, renewable energy, environment, land reform, development and nutrition policies affecting the South African sugar industry. This includes representation on the International Sugar Organisation, the Global Alliance for the Liberalisation of Sugar, the SADC Technical Committee on Sugar, and the World Sugar Research Organisation. External Affairs also liaises with other relevant international organizations such as the World Trade Organisation, Food and Agriculture Organisation and the International Fund for Agricultural Development. The work programme addresses a wide range of key audiences through direct contact with private enterprise, government and non-governmental organizations.

2.7.2 SA Cane Growers' Association

The South African Cane Growers' Association (CANEGROWERS) was established in 1927 to administer the interests of independent sugarcane growers. CANEGROWERS is a Section 21 Company (incorporated not for gain) and individual growers are members through the 26 grower groups which make up the member organizations of CANEGROWERS. In each mill area all member organizations are represented by a Local Grower Council. The democratic nature of the representation structure allows for the election of any individual cane farmer to the Executive Committee or Chairmanship of the organization. This, typically, would be through a region's Local Farmers' Association, its Local Grower Council, the centrally based Board of Directors (54 members) from which a Chairman and Vice-Chairman are elected annually, and finally to the Executive Committee (11 members). An Executive Director, management team and staff administer the day to day business of CANEGROWERS, to:

- o Ensure that cane growers receive fair value for their sugarcane.
- Provide cane growers with relevant research, data and support services to facilitate successful farming regions.
- Ensure that CANEGROWERS are recognized by all stakeholders as the duly mandated and effective representative of all cane growers in South Africa.
- Functions and Services:
- o Extension Services
- Statistical Services
- Production Cost Surveys
- Negotiations in respect of RV price determination (SASA the vehicle)

2.7.3 SA Sugar Millers Association

This Association represents the interests of all sugar millers and refiners in South Africa. The Association's objectives cover partnership administrative matters, legislative measures affecting the industry, and support for training and scientific and technological research. The Association is administered by an executive director and staff who undertake these activities and who interact with the other organizations, particularly CANEGROWERS and the South African Sugar Association, on matters concerning the industry. The members of the South African Sugar Millers' Association Limited are:

- **A. Illovo Sugar Limited.** Illovo Sugar presently operates four sugar mills in South Africa, one of which has a refinery and two which have packaging plants. It has three cane growing estates and, in addition to producing specialty sugars and syrup, also produces a variety of high-value downstream products.
- **B.** Tongaat Hulett Sugar Limited South Africa. Tongaat Hulett Sugar Limited operates four sugar mills in South Africa two of which have packaging plants, a central refinery in Durban which has its own packaging plant, various sugar estates and an animal feeds operation.
- **C. Tsb Sugar RSA Ltd.** Tsb Sugar RSA Limited operates three sugar mills two of which have refineries, a packaging plant, sugar estates, cane and sugar transport and an animal feed division.
- **D. Gledhow Sugar Company (PTY) Ltd.** On 10 September 2009 Gledhow Sugar Company (Pty) Ltd came into being. The company ownership is comprised of supplying growers with 25.1% equity; a long established miller (Illovo Sugar Ltd) with 30.0% equity; a paper manufacturer (Sappi Ltd) with 10% equity, and a BEE partner (The Sokhela Family Trust) with 34.9% equity. The mill has a 35 ton per hour refinery.
- **E. UCL Company Ltd.** UCL operates a sugar mill, a wattle extract factory, two saw mills, a number of mixed farms and a trading division.
- **F. Umfolozi Sugar Mill (Pty) Limited.** The Umfolozi Mill is owned by a group of four investors comprising a large cane growing company, the largest cane grower in northern KwaZulu-Natal, an unlisted public company whose shareholders grow sugarcane and an alcohol producing company.

Over time the number of sugar mills in KwaZulu-Natal has declined as the smaller mills found it difficult to contain increasing production costs. For example, At the time of the writing of this report it was announced that the Umzimkulu mill of Illovo at Port Shepstone was placed on standby for the 2011/12 due to it being uneconomical to operate it. It was subsequently reopened for the 2012/13 season. is not reopening after the summer recess. It is not yet clear if the closure is permanent or temporary as the official announcement only refers to the 2011/2012 season. The permanent closure of the mill would have a very negative influence on the cane producers on the Lower South Coast and producers towards Harding in KwaZulu-Natal as far as the transport cost to the Sezela mill is concerned.

2.7.3.1 Sugar Milling Research Institute

The Sugar Milling Research Institute (SMRI) is the central scientific organization involved in research work and technical services for the southern African sugar milling and refining industries.

- The Membership comprises 14 mills in SA plus Associated mills in Swaziland,
 Mozambique, Zambia, Zimbabwe, Malawi and Tanzania.
- The Institute is financed by a levy on the sugar produced at member mills and by payments for contract research and technical services undertaken for individual mills.
- The SMRI's strategic direction is overseen by the SMRI Board of Directors.
 The Institute's research activities are reviewed by an Advisory Research
 Committee which consists of members elected to represent the Institute's member mills.

3 Sugar Industry's Current Contribution to Social Economic and Environmental Development

In this chapter a summary of the social and economic contribution of the primary and secondary sectors of the industry to the South African community at large is presented.

3.1 Economic Contribution

The South African sugar industry makes an important contribution to the national economy, given its agricultural and industrial investments, foreign exchange earnings, its high employment and linkages with major suppliers, support industries and customers. It is a diverse industry combining the agricultural activities of sugarcane cultivation with the industrial factory production of raw and refined sugar, syrups and specialized sugars, and a range of by-products.

Based on revenue generated through sugar sales, in the SACU region and world export market, the South African sugar industry is responsible for generating an annual average direct income of R12 billion. The average annual value of sugarcane production is R5.1 billion⁵. The industry contributes an estimated average R2.5 billion to the country's foreign exchange earnings on an annual basis. The 2011 Abstract of agricultural Statistics by DAFF (published 2012) showed that value of sugarcane production represents 17.4% of total gross annual field crop production value. Sugarcane is the second largest South African field crop by gross value, surpassed only by maize.

⁵ Source: SASA Industry Directory 2012-2013

The sugar industry makes an important contribution to direct employment in sugarcane production and processing, and provides indirect employment for numerous support industries in the three provinces where sugarcane is grown — Kwazulu-Natal, Mpumalanga and the Eastern Cape — in sectors such as fertilizer, fuel, chemical, transport, food and services. It is a strategic crop for Kwazulu-Natal and Mpumalanga, where sugarcane production is located, comprising nearly 50% of field crop gross farming income across the two provinces.

The study's findings on employment are that the Sugar Industry's operations sustain in total about 113 009 (direct, indirect and induced) jobs in South Africa, of which 93 990 are direct, 7 356 indirect and 11 663 induced. The 93 990 includes 7 000 mill jobs, 1671 industry support jobs, 1 438 large scale farmers, and 13871 small scale farmers and 70 010 workers on large scale farms.

About 107 721 of the total are located in KZN and the Mpumalanga Lowveld. Of these, 93 996 are direct, 7 356 indirect and 6 369 induced. This employment impact of 113 009 represents about 0.9% of the total employment in South Africa, about 5.1% of the total employment in the KZN and Mpumalanga Lowveld regions and 18% of the total agricultural employment in South Africa. It is important to note that these percentages are higher than those of GDP mainly because of the relative labour intensity of the sugar industry, compared to other large agricultural crops like maize and wheat production, or in the livestock production sectors, beef and mutton.

However the number of dependents on the sugar industry is as important as the workers themselves in the poverty stricken rural areas of KZN and Mpumalanga Lowveld. The reality is that it is only the sugar industry that has invested extensively in these areas with accompanying large scale industrial investments. If the number of dependents on the sugar industry is calculated, then 4 dependents per employee gives a total of 400 000 dependents on the sugar industry using the NAMC numbers. The number of 4 is in line with the latest census figures as released by Stats SA. However, the sugar industry is mostly situated in the deep rural areas where the KZN figures indicate a dependency of over 5 people per employee which indicates a dependency of nearly 600 000 people.

According to research commissioned by the South African Sugar Industry (prepared by J McCarthy: 2008) in relation to the economic contribution of the industry to the sugar farming and milling areas, the following findings were made:

- Sugar milling towns are consistently found to have much lower levels of unemployment and higher per capita incomes than other small towns in South Africa and indeed better than the national averages
- Sugar farming areas, also, are found to have much lower unemployment levels, and significantly higher per capita incomes, than their surrounding rural areas
- Services levels in sugar milling and farming areas are much higher than in equivalent rural or small town contexts adjacent, or elsewhere, largely as a

result of direct contributions by the industry, farmers and /or partnerships with government.

3.1.1 Physical Magnitude of Industry

Sugarcane in South Africa is grown in 14 identified cane producing areas according to the supply area of the different mills, extending from Northern Pondoland in the Eastern Cape Province through the coastal belt and KwaZulu-Natal midlands to the Mpumalanga Lowveld. There are currently 26 612 registered sugarcane growers. Of these 25 193 are small-scale growers. Approximately 1419 registered growers are large scale (inclusive of the 323 black emerging farmers). The farmers annually produce on average 20 million tons of sugarcane from the 14 mill supply areas. Of the 25 193 small scale farmers, 11 684 delivered cane last season, producing 9.3% of total crop. The large scale farmers produced 83.2% of total sugarcane production. Milling companies with their own sugar estates produced 7.5% of the crop. The table below shows the number of small and large scale sugarcane growers in all cane supplying areas.

Based on revenue generated through sugar sales, in the SACU region and world export market, the South African sugar industry is responsible for generating an annual average direct income of R12 billion. The average annual value of sugarcane production is R5.1 billion. The industry contributes an estimated average R2.5 billion to the country's foreign exchange earnings on an annual basis. The sugar industry's contribution to the South African economy was assessed in the 2008 study by Professor Jeff McCarthy as follows:

- The industry contributes between 0.5 and 0.7 per cent of national GDP. The industry accounts for 0.9 % of total merchandise exports by value, 0.5% of total income tax, 3.6% or total fixed capital stock of business enterprises, and 0.3% of salaries and wages;
- The estimated national multiplier for the sugar industry is 3.2, implying that for every R1 increase in output from sugar farming, milling and refining combined, national GDP will grow by R3.20;
- The estimated national multiplier of 3.2 for the sugar industry compares very favourably with a national multiplier of 3.0 estimated for the wine industry in South Africa in 1996 prices.

In the following box the concept of multipliers is explained:

All economic models incorporate a number of "multipliers" which form the nucleus of the modelling system. The nature and extent of the impact of a change in a specific economic quantity, e.g. exports, on that of another economic quantity or quantities, e.g. production output or employment, is determined by a "multiplier". A multiplier summarises the total impact that can be expected from a change in a given economic activity. For illustrative purposes the figure below shows the multiplier concept used in assessing the change in economic activity.

| R1.20 | | | | | | |
|-------|-------|---------------|---|---------|-------|---------------------------------------------------------------------------|
| | | Spent locally | ı | Leakage | | |
| R1.00 | R1.00 | | | | | Initial Impact: R1.00 Turnover 1: R0.40 Turnover 2: R0.16 |
| R0.80 | | | | | | Turnover 3: R0.06 Turnover 4: R0.03 Turnover 5: R0.01 Full Impact = R1.66 |
| R0.40 | | R0.40 | | | | |
| R0.20 | | | | R0.16 | | |
| R0.00 | | | | | R0.06 | R0.03 R0.01 |

In this example, R1 is received into the local economy of the area from sales beyond the route borders. Of this, 40 cents is spent on goods and services within the region. The economic sectors and individuals who receive the 40 cents spend 16 cents while enroute. Of the 16 cents, only six cents is spent locally, and so on. The total amount of money received by local firms and residents as a result of the initial R1 in added exported earnings is R1.66. Therefore, the multiplier is R1.66.

The change in economic activity resulting from the change in one factor of production, such as water resources, is measured by different multipliers. Four multipliers are commonly used to assess the impacts of an initial increase in production resulting from an increase in sales, usually called final demand in multiplier analysis. The four multipliers are: (1) output, (2) employment; (3) income; and (4) value added services.

Sectoral multipliers are calculated using information contained in the applicable Provincial Social Accounting Matrix (SAM) and the National SAM as well as data obtained from the South African Reserve Bank and Statistics South Africa. These inverse matrices capture all the direct and indirect relationships among the inputs and outputs of the various entities included in the applicable provincial SAM.

Direct GDP, labour and capital multipliers for each sector are calculated using the following formulae:

GDP multiplier = <u>Value Added</u>

Production

Labour multiplier = <u>Employment</u>

Production

Capital multiplier = <u>Capital stock</u>

Production

| Cane Supply Area | LARGE SCALE | SMALL SCALE | TOTAL |
|------------------|-------------|-------------|--------|
| Komatipooirt | 83 | 852 | 936 |
| Malalane | 96 | 390 | 487 |
| MPUMALANGA | 179 | 1,242 | 1,423 |
| Pongola | 134 | 244 | 378 |
| Umfolozi | 87 | 7,494 | 7,581 |
| Felixton | 105 | 6,055 | 6,161 |
| ZULULAND | 326 | 13,793 | 14,120 |
| Amatikulu | 128 | 8,357 | 8,48 |
| TUGELA | 128 | 8,357 | 8,486 |
| Darnall | 119 | 294 | 415 |
| Gledhow | 134 | 2,298 | 2,432 |
| Maidstone | 93 | 2,028 | 2,124 |
| NORTH COAST | 346 | 4,620 | 4,971 |
| Eston | 142 | 1,728 | 1,872 |
| UCL | 71 | 21 | 93 |
| Noodsberg | 149 | 619 | 768 |
| MIDLANDS | 362 | 2,368 | 2,733 |
| Sezela | 120 | 2,841 | 2,963 |
| Umzimkulu | 116 | 521 | 640 |
| SOUTH COAST | 236 | 3,362 | 3,603 |
| TOTAL | 1,577 | 33,742 | 35,336 |

Table 2: Number of Cane Growers per Province and Mill Supply Region⁶

The South African sugar industry utilises about 460 000 hectares of land, most of which is in the coast of KwaZulu Natal. The harvested area rose by 1.3% from 307 380 ha in the 2007/08 season to 311 425 ha in 2008/09, only to fall by 6.3% in the 2009/10 harvesting season. The estimated hectares under sugarcane (not just harvested) for the 2009/10 season is 391 483 hectares, which have also fallen by 5.3% in 2009/10 season as shown in the figure below.

⁶ South African Cane Growers Association 2009 -2010 Report

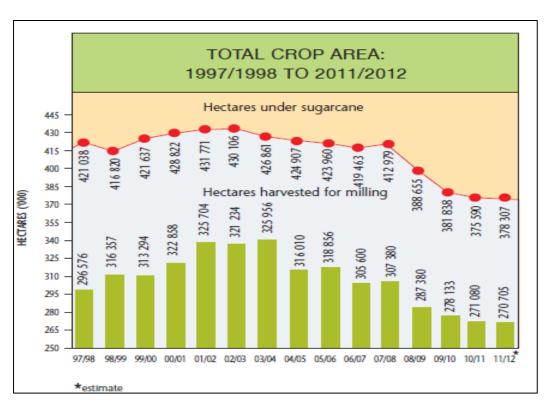


Figure 1: Area under cane and area harvested annually⁷

An analysis of the hectares harvested by small-scale and large scale producers is done below. Figure 2 shows the area harvested by large scale growers and Figure 3 the area by small scale producers. There was a decline in the area harvested by large scale producers between the 2007/08 and 2008/09 season. However, an increase is estimated for the 2009/2010 season.

⁷ Source: SASA Industry Directory 2012/2013

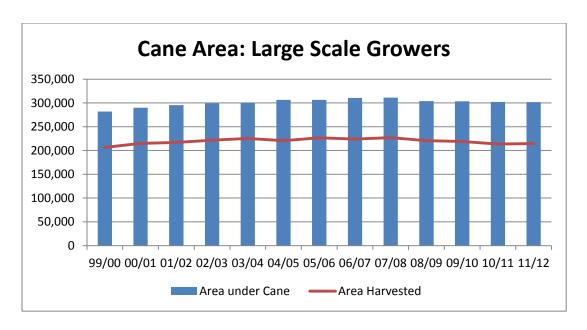


Figure 2: Area Cultivated and Harvested by Large Scale Producers8

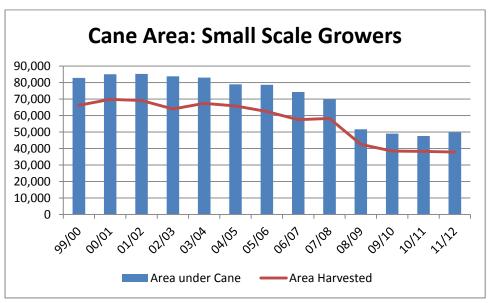


Figure 3: Hectares Harvested by Small-Scale Growers9

The figure above shows a trend that the number of hectares harvested by the small growers has declined from around 60 000 hectares to just over 40 000 hectares in the last five seasons. In the next figure a more detailed analysis per production region is presented.

⁸ Source: South African Cane Growers Association

⁹ Source: South African Cane Growers Association

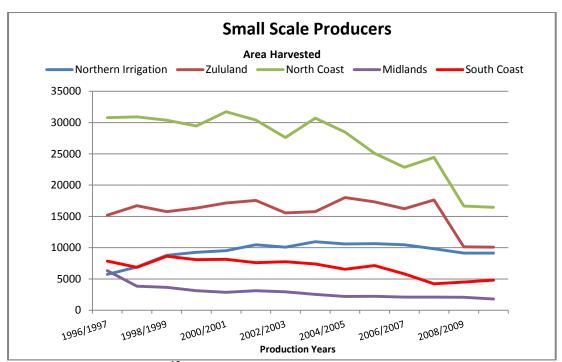


Figure 4: Area Harvested¹⁰ by Small-Scale Producers Presented per Region¹¹

The graph indicates that the largest decline in the area harvested by small-scale producers took place on the North Coast, followed by Zululand. The area harvested on the North Coast dropped from about 31 000 during the 1996/1997 season to 16 000 for the 2009/2010 season.

The average cane production over the past decade (from 1999/00 to 2008/09 season) is 20.9 million tons per annum, with the yield of harvested cane averaging 66.2t/ha over the same period. In the season 2008/09 the yield was 63.4t/ha. The production of sugarcane decreased by 2.4% between the 2007/08 and 2008/09 seasons. Droughts in major cane production regions were the cause of the lower than average cane supply in 2010. Expected deliveries for the 2012/13 season are estimated at around 17.2 million tons cane.

¹⁰ Note: Regions classified on a different basis than with industry reporting standards

¹¹ Source: South African Cane Growers Association

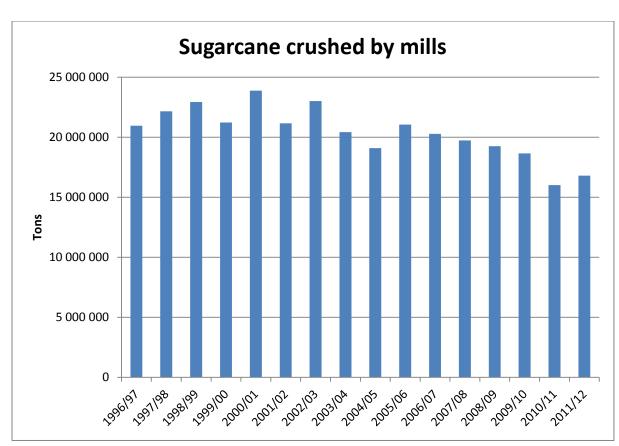


Figure 5: Total Sugarcane crushed per season¹²

In the next graph the position as far as sugar produced over the last number of years is presented.

¹² Source: South African Cane Growers Association

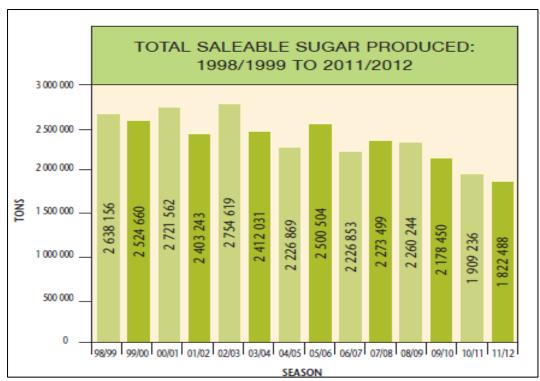
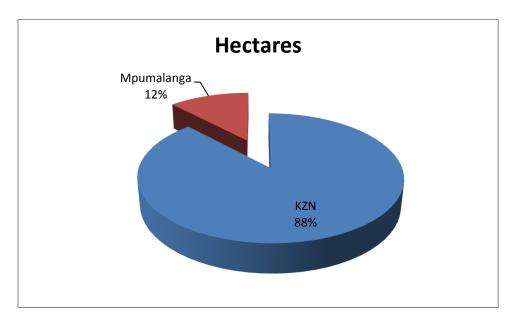


Figure 6: Saleable Sugar Produced per Season¹³

As expected the same trend as in cane crushed also manifests itself in volume of sugar produced, a decline manifesting itself. From a high of over 2.7 million tons during the 2002/2003 season it has shrunk to about 2.1 million tons for 2009/2010 season.

In the next figures a comparison between the area cultivated and tons of cane produced in KwaZulu-Natal and Mpumalanga provinces.



¹³ Source: South African Sugar Association

Figure 7: Comparison between the KZN and Mpumalanga in terms of Hectares under Cane in 2011/12

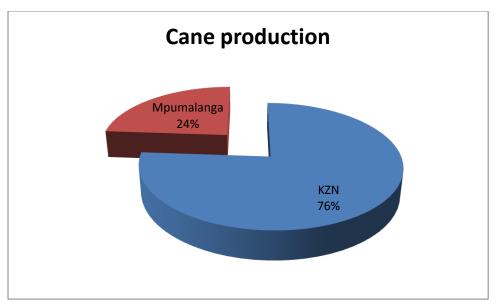


Figure 8: Comparison between the KZN and Mpumalanga in terms of Volume Cane produced in 2011/12

The two figures indicate that although only 12% of the cane producing hectares is in Mpumalanga they produce 24% of the annual sugarcane. The reason is that all the cane is Mpumalanga is produced under irrigation systems.

3.1.2 Funding of Research

The South African Sugarcane Research Institute (SASRI) funded by the sugar industry, is the leading sugarcane research institute in Africa. SASRI is world-renowned for its research into the development of new sugarcane varieties, and improved crop management and farming systems that enhance profitability. The SASRI research is focused on four multi-disciplinary programmes:

- Finding and improving breeds that are high yielding, pests and diseases resistant.
- Minimizing the impacts of weeds, pest and diseases on crops in environmentally sustainable ways.
- The Crop Performance and Management programme focuses on enabling production of high quality sugarcane
- o Investigating and developing innovative systems that optimize crop production through modelling, technology design and a farming systems approach.

On the milling side, the Sugar Milling Research Institute (SMRI) is the central scientific organisation involved in research work and technical services for the Southern African sugar

and milling refining industries. The institute is financed by a levy on the sugar produced at member mills and by payments for contract research and technical services undertaken for individual mills.

3.1.3 Extension Service

SASRI's extension service provides the necessary link between SASRI researchers and the farmers through consultation and feedback. Its main objective is to facilitate the adoption of technology and better management practices that encourage responsible and sustainable land use as well as the delivery of optimal productivity and profitability. Services provided to the industry include Specialist Advice on growers' problems as well as soils and leaf analyses through the Fertilizer Advisory Service. Short courses in Sugarcane Agriculture are also offered annually. SASRI also operates the only sugarcane quarantine facility in South Africa. The Extension Service provides the essential link between SASRI researchers and farmers through consultation and feedback. Its primary role is to facilitate the adoption of technology and best management practices that encourages responsible and sustainable land use and delivers optimal productivity and profitability. A range of services is provided to the industry on a user-pays basis, including Specialist Advice on growers' problems and soils and leaf analyses through the Fertilizer Advisory Service. Short courses in Sugarcane Agriculture at the junior and senior levels are held annually. SASRI also operates the only sugarcane quarantine facility in South Africa.

3.1.4 Training and Development

With the slogan 'Training today's people for South Africa's tomorrow', the Shukela Training Centre is the preferred provider of agricultural and engineering training to the sugar industry.

The Agricultural Training Department focuses on the sugar industry and provides skills based training to all sugarcane farmers. The courses take place on the farms, the training has a high practical component and can be of benefit to new entrants into sugarcane growing, established commercial and small-scale growers and farm workers.

Engineering training is carried out at the Shukela Training Centre based in Mount Edgecombe, where accommodation is available for the learners. The Centre proudly boasts training equipment that spans the progress of technology. Learners are trained in electrical, electronics, fitting, millwright, refrigeration and welding trades. Being a de-centralized trade test centre, apprentices can sit their trade tests once they have completed their apprenticeship training. The Centre is also accredited to train and test for the Electrical Installation Certificate of Competency. STC holds overall accreditation with the AgriSETA and has programme approval with many other SETAs including the MERSETA, CHIETA and ESETA.

The centre also offers training to regional industries as part of the industry's support for regional integration and the training and competitiveness objectives of Annex VII to the SADC Trade Protocol. On-site accommodation and meals are offered for local and foreign learners, making it easier for the centre to conduct training for learners from other SADC states. The STC has also assisting other SADC industries through visits, advice and

consultation to specific milling companies and their associated training centres. From 2003 -2009 around 1500 learners from SADC were trained.

The Cane Growers Association also offers training to its members. During the 2009/2010 season, 814 small-scale growers participated in various training courses facilitated by CANEGROWERS. The courses included knapsack operation, cane cutting, occupational health and safety, sugarcane husbandry and first aid.

3.2 Social Contribution

SASA has a number of initiatives that are aimed at alleviating poverty and improving the quality of life of the people. These will be discussed in the following paragraphs.

3.2.1 Contribution to Education

The main objective of the education programme is to promote an environment in which all people in and round the sugarcane growing areas have access to quality education and training. The sugar industry has long been a funder of education initiatives through the Sugar Industry Trust Fund for Education (SITFE). The foundation was launched in 1965 and is regarded as one of the country's oldest Trust Funds supporting the provision of quality education in deep rural schools. The South African Sugar Association administers the Trust Fund on behalf of its principals. In its 45 years, the Trust Fund has supported a broad spectrum of educational programmes ranging from:

- Study assistance programme
- o In-whole school support programme
- o Early childhood development programme
- o Education Centre Programme
- School building programme, over R1.8 million has been invested in 30 classrooms.

Through the study assistance programme, SITFE has invested in the lives of more than 9 660 students from socially and academically disadvantaged backgrounds within the sugarcane growing communities. The objectives of the Trust Fund are:

- To promote the provision of quality education and training in response to skills required in the sugar industry
- To promote awareness and appreciation of South Africa's cultural heritage
- o To build partnership within the industry and beyond
- o To develop new forms of funding partnerships in sugar growing regions.

3.2.2 Contribution to Health

As a rural based industry, it sees itself as part of the communities in which it operates. It also views itself as a key player in the promotion of health and nutritional wellbeing of people associated with the sugar industry and beyond. Through SASA the industry spends approximately 17% of its social investment budget supporting community based

organisations implementing broad community health programmes. The main objective of the SASA health programme is to increase communities' capacities to coordinate and respond to health challenges in a sustainable manner. Its other objective is to invest in the prevention, protection and improvement of the people's overall physical and mental wellbeing. SASA's support therefore focuses on:

- o community awareness programmes;
- home based care programmes;
- food parcels programmes;
- o support programmes for AIDS orphans and child headed households

3.2.3 Contribution to Welfare

The industry, through the South African Sugar Association understands that there is a need for a broad range of interventions that will encourage people to become permanently self-reliant while also supporting those people who due to their inherent vulnerabilities, rely on government and charity organisations for their wellbeing. The objective of the welfare programme is to improve people's potential for self-sufficiency not only through the provision of food parcels but also by broadening opportunities for self-sufficiency. Funding in this category is wide ranging and covers poverty alleviation, skills development, disability and disaster relief. Projects focusing on the needs of women, youth and children are given priority. Support is provided to approximately 14 community-based organisations under the welfare programme. Amongst the organisations funded are the following: Uthungulu Community Foundation, Ubuntu Community Chest and Genesis Trust and Give a Child a Family.

Launched in 1999, the sugar donations programme is one of the most important social investment programmes within the South African Sugar Association. The programme reaches out to all the registered nongovernmental organizations and faith based organizations within the sugarcane growing provinces. Over the past 8 years, the programme has grown to become one of the vital tools utilised by grassroots organizations supporting individuals in a persistently poor circumstance. The objective of the programme is to promote human dignity and improved quality of life of people without effective support systems at family and community level. SASA contributes over 17% of its social investment budget to 58 welfare and community based organizations operating within KZN, Mpumalanga and Eastern Cape under the sugar donations programme. The organizations that are supported operate soup kitchens, hospices, child and family welfare societies, old age homes and drop in centres.

3.2.4 Small Scale Farmers

The establishment of small farmers is a priority for the Government. The sugar industry has actively put programs in place over the last 20 years to facilitate the process, and also supports the entrance of large scale black farmers into the industry. Small scale farmers mainly farm on the tribal land rather than on freehold land. The government has sought to empower cane farmers through its land redistribution program which enables farmers to purchase freehold land. In attempting to achieve its objectives of economic growth, broadbased economic empowerment and poverty alleviation, government has indicated that land

redistribution efforts should become increasingly focused on small-scale growers and empowering farm workers.

3.2.4.1 Development Fund

The industry uses the Grower Development Account (GDA) to fund development interventions aimed at improving the sustainability and growth of all black growers, particularly black small scale growers. The GDA was established in 1998 to promote the development and sustainability of small scale growers and all black growers through an integrated development approach. It also seeks to respond to national imperatives to promote black economic empowerment. The GDA does not provide funding to offset any costs directly related to the production of sugarcane. Over the past 13 years, approximately R74 million has been invested in the development of small-scale growers. There are currently eight major projects intended to help the sugar industry progress its business and government's broad based BEE and sustainable development. Those are:

- Seed cane schemes. Accessing quality seed in the tribal areas remains extremely difficult for the small scale growers. In the past limited amount of seed cane used by the small scale growers was obtained from large scale growers farming in close proximity with the small scale growers. Recently, the supply has become insufficient and in many instances long haulage distances results in excessively high prices. The seed cane scheme programme aims to ensure that the small scale growers access quality seed cane at competitive prices. It also provides opportunities for the growers to participate in workshops and training programmes aimed at improving their profitability and sustainability.
- Diversity management training. Annually, considerable resources are allocated towards South African Cane growers' Association to accelerate the training and empowerment of the small scale growers in all the sugarcane growing provinces. The training includes:
 - o Cane husbandry
 - o Junior sugarcane course
 - o Leadership training
 - o Diversity management workshops
 - o Elementary tractor mechanisms
- o Institutional capacity development of the small scale grower organization
- Land reform programmes. The sugar industry is committed to contributing to sustainable land reform. The industry understands that without sustainable land reform, there will be no long lasting social and economic transformation for the black farmers and surrounding communities. In 2003, the industry established the Inkezo Land Company to support government's objective of transferring 30% of the land under sugarcane back into black hands by 2014.

While Inkezo's activities mainly focused on fast tracking the transfer of sugarcane land, the Land Company also aimed to assist other commodities with their land reform processes. Inkezo Land Company has provided a seamless service to willing buyers and willing sellers by:

- o Providing pre-purchase training and guidance regarding the business aspects of farming,
- o Facilitating transactions
- o Compiling business plans
- o Raising finance
- oSecuring government grants from the Department of Land Affairs and the KZN Department of Agriculture and Environmental Affairs and
- o Coordinating post-transfer support
- Extension poster series
- Sustainable livelihood analysis toward a small scale grower strategy
- Intercropping trials
- Small scale grower extension service joint venture initiative

3.2.4.2 Umthombo Loans to Small Farmers

The sugar industry also manage a fund dispersing production loans to small farmers called the Umthombo Loans, the funds dispersed is from industry sources. The following table gives an indication of the funds dispersed over the last five years.

| Mill Area | 2007 | 2008 | 2009 | 2010 | 2011 | TOTAL |
|-----------|-------------|--------------|--------------|--------------|--------------|--------------|
| Amatikulu | R 36 000 | | | | | R 36 000 |
| Darnall | R 16 672 | | | | | R 16 672 |
| Entumeni | R 1 042 | R 0 | | | | R 1 042 |
| Felixton | R 17 806 | R 2 040 | R 8 729 | | | R 28 575 |
| Gledhow | | | | | R 2 382 367 | R 2 382 367 |
| Glendale | | | | | | R 0 |
| Komati | R 4 224 873 | R 7 794 162 | R 9 118 974 | R 16 182 333 | R 19 116 846 | R 56 437 188 |
| Maidstone | R 1 903 | | | | | R 1 903 |
| Malalane | R 4 756 864 | R 3 844 262 | R 2 254 160 | R 3 350 263 | R 7 141 714 | R 21 347 264 |
| Sezela | R 665 852 | R 29 757 | R 1 185 454 | R 487 324 | R 103 032 | R 2 471 419 |
| Umfolozi | R 4 045 | | | | | R 4 045 |
| Umzimkulu | R 248 939 | R 124 304 | R 356 995 | R 435 576 | R 115 000 | R 1 280 814 |
| TOTAL | R 9 973 997 | R 11 794 526 | R 12 924 311 | R 20 455 496 | R 28 858 960 | R 84 007 290 |

Table 3: Loans Distributed by Umthombo over the last five years (Source: SASA)

3.2.5 Land Reform

In 2003, the industry established an independent land reform entity, called Inkezo Land Reform Company. This was to support the government's objective of transferring 30% of the land under sugarcane into black hands by 2014. Inkezo's main objective is to facilitate transfer of land by identifying sellers and buyers, streamlining the process of land reform and promoting sustainability of the new ventures through outsourced support service providers. Inkezo facilitated the transfer of land previously owned by white farmers to black owners.

Approximately 70 627 hectares of freehold land has been redistributed to date (table below).

| Area Under Cane | Hectares | % of total |
|-----------------------------|----------|------------|
| Freehold area under cane | 336 321 | 100% |
| 30% target | 100 896 | 30% |
| Black owned freehold under | 70 627 | 21% |
| cane | | |
| Balance to be redistributed | 30 269 | 11% |

Table 4: Estimated Area under Cane - 2011/201214

Although 21% of freehold land under sugarcane has already been transferred to black growers, more than 50% of the freehold land under cane is subject to claims in terms of the land restitution programme. The sugar industry is eager for these claims to be resolved and as such it has refocused its support to land reform towards the land restitution process in an effort to speed up the transfer of land while at the same time promoting sustainable sugarcane production on land under transfer as well as land already transferred. Inkezo

1

¹⁴ Source: SASA

Land Company's role in land reform has been expanded to manage and facilitate presettlement and post-settlement support for land redistribution and land restitution. This expansion has resulted in Inkezo being incorporated into SASA, and a Land Reform Department being established. The Department focuses on managing and fast tracking the processes of land redistribution and restitution in the sugar sector and on facilitating access to resources made available by stakeholders, notably through governments newly established Agri-business Development Agency (ADA).

3.2.6 Environmental Sustainability

The environment is a crucial element for sustainable development and any form of environmental degradation inevitably is linked to negative social impacts on the community. As such, SASA has an environmental programme, with the objective to support the environmentally friendly community based development initiatives. SASA is committed to and promotes sustainable environmental practices and education through the following:

- Funding projects that have clear environmental objectives based in KwaZulu-Natal and Mpumalanga provinces. Examples of such projects are outlined below:
- Supporting the Dokodweni Eco-tourism Development Programme in KwaZulu-Natal, North Coast. The Dokodweni programme is a ground breaking initiative focused on eradicating and controlling alien weed through the process of manual removal and chemical eradication. In addition, this ecotourism programme is focused on upgrading existing camp sites and beach areas to stimulate small business activity in the surrounding rural communities.
- Teaming up with Sukumani Community Empowerment Project based in Mpumalanga to promote the "greening" of communities through the planting of indigenous trees. The Sukumani Community Empowerment Project was born to create meaningful activities for the youth. Different projects are started to address the challenges that the youth in the area are facing.
- Support for environmental education in schools in the sugarcane farming belt sugarcane through the internationally recognised Eco-Schools programme. It is envisaged that support of this programme will instil the principles of sustainable natural resource management into the lives of younger learners in the province and who could potentially feed into the next generation of farmers and millers in the South African sugar industry
- o Partnering with internationally renowned environmental organisations.
- SASA signed a Memorandum of Understanding with the World Wildlife Fund for Nature (WWF) with regards to environmental protection, with emphasis on the conservation of fresh water, estuarine habitats and the promotion of biodiversity. Through this partnership, there is potential to engage in joint sustainable environmental management projects and assisting local

- environmental committees with appropriate better management programmes.
- O SASA has also signed a Memorandum of Understanding with the Wildlife and Environment Society of Southern Africa (WESSA) with a focus on promoting and implementing environmental sustainability practices, and related education and social learning processes that will strengthen environmental and social change within the South African sugar industry. The agreement with WESSA will facilitate and implement the incorporation of better management practices i.e. the Sustainable Sugarcane Farm Management System (SUSFARMS) into the daily activities of the sugarcane sector. SUSFARMS aims to reduce the South African sugar industry's impact on biodiversity and ecosystems, through an extension programme that assists farmers to adapt to better environmental management practices.
- Environmental education and training opportunities and transfer of knowledge.
- Knowledge transfer of sugarcane environmental research, including the development of best management practices.
- Supporting the environmental committees based in the sugarcane producing area.
- Through its world-renowned research institute (SASRI), SASA is committed to also finding environmentally friendly methods of weeds, pests and diseases control. This is done through the Crop Protection research which is aimed at minimizing impacts of weeds, pests and diseases on crop yields in environmentally sustainable ways. Emphasis is placed on integrated pest management and proactive biosecurity measures.
- SASA is also committed to environmental education and training through the environmental courses in sugarcane agriculture offered by SASRI, together with its network of extension specialists and the Shukela Training Centre (STC), to ensure sustainable farming practices with minimum impact on the environment.

3.3 Growth Dynamics

As previously discussed the growth in the South African industry is linked to developments in the SACU/SADC communities and policy decisions reached at that level, together with international production and marketing and government policy developments, which influences the profitability of the RSA production at primary as well as secondary level.

The SACU market comprises South Africa, Botswana, Lesotho, Namibia and Swaziland. South Africa and Swaziland are the only sugar producers in SACU and together produce in excess of the region's sugar demand. The summary following was based on the 2009/10 season to illustrate the industry prior to the drought which impacted figures in 2010/11 and 2011/12.

Production which was estimated at 1.92 million tons in 2009/10. SADC access to the market is regulated by the Southern African Development Community Sugar Co-operation agreement. Duty-paid imports from the world market continued to play a significant role in the supply of sugar into the SACU market in the 2009/10 season, although higher world market prices did constrain imports for a short period.

The unadjusted SACU demand in 2009/10 showed a growth of 0.01% over 2008/09, but South African sugar sales for the period grew by 1.3%. The higher growth in South African sales was attributable mainly to the lower supplies by Zimbabwe into the SACU market in 2009/10. Further, sugar imports declined by 19.2% compared with 2008/09, mainly because of the higher world market sugar prices during the latter half of the season.

Despite the decline in South African sugar production, supply within the SACU market exceeded demand during the 2009/10 season, enabling 766 177 tons to be exported, which was lower than the 821 657 tons of export sugar in the previous season.

The 2009/10 sugar exports represented 35% of total production, of which only 22 806 tons benefited from access to the preferential market in the USA, with the balance being exposed to the volatile New York Board of Trade #11 world market bulk raw sugar price.

World market sugar prices reached a 28 year high during 2009/10 as a result of the supply shortage brought about primarily by the low Indian crop. This resulted in an increase in the average sugar price achieved for SASA's world market exports, with 16.47USc/lb (inclusive of preferential US market prices) being achieved, compared with 12.55USc/lb during the previous season. This represented a 31% increase. The R/US\$ exchange rate was forward covered at an average exchange rate of R8.14 to the US Dollar. This was lower than the average exchange rate of R8.35 achieved in the 2008/09 season. Despite the reduced exports volumes and the firmer R/US\$ exchange rate in 2009/10, the higher world market price resulted in a 15% increase in export revenue, being R2.3 billion in 2009/10, compared with R2.0 billion in 2008/09.

The South African producer has been under financial strain the last number of years, caused by production inflation, product prices not keeping pace with increasing production costs and a drought in the KZN coastal areas.

4 Contentious Marketing Issues within the Sugar Industry

A number of issues have been identified as being contentious as far as the marketing of sugar is concerned. The perceptions of the issues at stake are different for the role players, because of different policy agendas and interests. At present the role players can be identified as the primary producers, secondary industry, government and consumers.

The primary producers (cane growers) are comprised of the large and small scale producers with the small scale producers producing on free-hold and communal land. They are all represented by the SA Cane Growers Association.

The secondary industry (millers) is represented by the SA Sugar Millers Association, which includes the mills with refineries and those without refineries.

Historically the "Sugar Act" falls under the Department of Trade and Industry (DTI) and not the Department of Agriculture like the other agriculture based products.

In the following sections a number of the contentious issues will be identified and discussed.

4.1 Sugar Industry Supply Chain

It is necessary that the sugar industry supply chain be discussed before a detailed discussion of the marketing arrangements take place. The following diagram gives a schematic indication of the supply chain. It shows the process from the research process to the consumer, with the contributing sections fitted in to a long supply chain. It has been stated already that the present institutional structure in the industry is the result of the symbiotic relationship between the sugarcane grower and the sugar mill. The high cost of transport and the fact that the sucrose content in cane degrades quickly over time makes it impossible to transport sugarcane over long distances with the result that the majority of the cane delivered to a specific mill is mostly produced no further than 40 to 50 km from the mill.

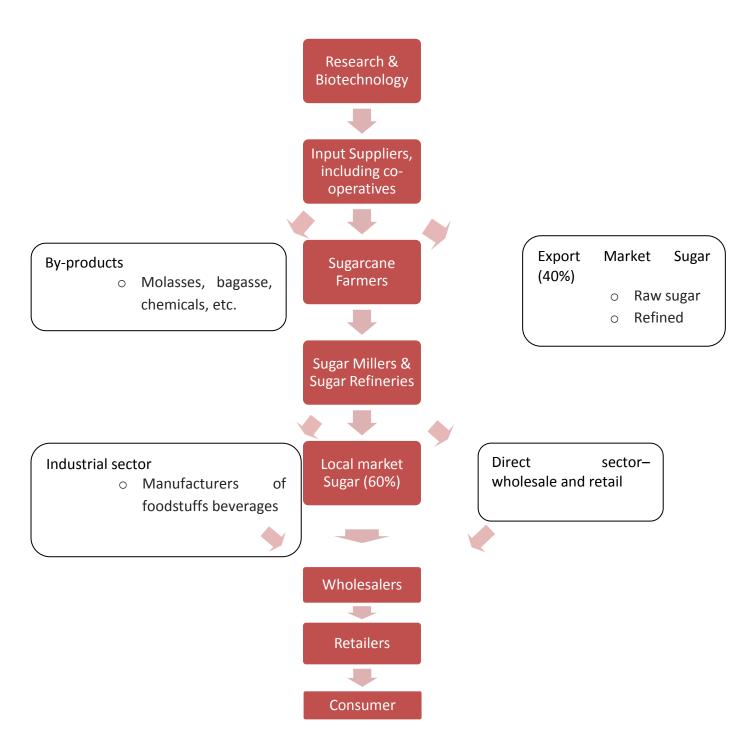


Diagram 2: The Sugar Industry Supply Chain

Overtime marketing arrangements have been developed which are managed by the industry via the South African Sugar Association (SASA). The detail is discussed in the following sections.

4.2 Marketing Arrangements - Domestic

In understanding and evaluating the sugar marketing process the following rough presentation of the current a position of the market.

| Total SA Production: | Domestic Market: | Export Market: | |
|-----------------------|------------------------------------------|-----------------------|--|
| 60% Domestic Marketed | 70% of 60% Household - Refined | 95%+ is raw sugar | |
| 40% Exported | 30% of 60% Industrial – Refined and raw. | Difference is refined | |
| 0 | | | |

Table 5: Marketing Distribution

South Africa is rated to be one of the world's most cost competitive producers of high quality sugar. According to independent surveys of the costs of production of more than 80 global sugar industries, the South African sugar industry consistently ranks amongst the top 15, and usually within the top 10, for both ex-factory and "free-on-board" categories. Its excellent export infrastructure, world-renowned agricultural and industrial research platforms and efficient industry organisation are key drivers of excellence.

Four of the 14 mills operating in South Africa are known as "white end" mills and produce their own refined sugar. Part of the raw sugar produced by Tsb Sugar RSA Ltd is refined at the Malalane "white end" mill, and the balance is exported via the sugar terminal in Maputo, Mozambique. The raw sugar produced at the remaining mills that are not used by the milling companies for exports of bagged refined sugar or direct consumption raw sugar, is routed to Durban. Here it is either refined at the central refinery of Tongaat Hulett Sugar Ltd or stored at the South African Sugar Association Sugar Terminal prior to export. Diversity is the key factor in today's highly integrated sugar milling operations. Amongst others, one of the mills produces a range of other products such as ethyl alcohol and furfural and its derivatives, although these activities are outside the industry partnership.

Despite its comparative production efficiencies, the South African sugar industry finds it difficult to export profitably to the world market, as the global sugar price is severely affected by subsidy-induced overproduction in some major sugar-producing countries. Access to the major markets for raw and refined sugar is furthermore restricted by high tariffs and preferential trade arrangements in the form of tariff rate quotas.

As previously discussed the regional sugar market of SACU (South Africa, Swaziland, Lesotho, Botswana and Namibia) is managed as a single entity by the Government and the Sugar Industry to which entry is controlled by a tariff system. The SACU countries are also members of the enlarged entity called SADC. Through trade agreements between SACU and SADC a certain volume of sugar is allowed to be marketed in the SACU market without implementing the tariff regime. This agreement between SACU and SADC is called the SADC Sugar Protocol and, as noted above, is Annex VII to the SADC Protocol on Trade.

In order to explain the present marketing arrangement, the following table reflects the SACU market in terms of sugar flows and the method of estimating market share and export availability.

| Activity | | | | | |
|-----------------------------------------------------------------------------------|--|--|--|--|--|
| Estimated Gross SACU sugar market | | | | | |
| Minus Zimbabwe/SADC/deep sea imports estimate | | | | | |
| Minus Swaziland estimate | | | | | |
| = Net SACU market sales estimate | | | | | |
| Estimated RSA production minus estimated market sales = export sugar availability | | | | | |

Table 6: Explaining the Marketing Arrangements –SACU and SADC

Under the SADC trade protocol, SADC members that are net surplus sugar producers have as of April 2011 been granted access to the SACU market based on the average annual access quotas qualified for by non-SACU SADC sugar-producing countries since the inception of the agreement up to 2007/08. This was so as to reflect the exposure of these producers to the world market and offset the losses this entailed. There were two elements to the foundation of the quotas in the agreement:

- Each surplus sugar producing country in SADC was granted a pro rata share of a quota that is equal to the annual growth in SACU sugar consumption. In the first year 2000/2001, it was set at 45 000 tons.
- An additional annual, duty free quota of 20 000 tons was allocated among non-SACU members of SADC that are sugar producers.

Although it is accepted that the marketing arrangements are a dynamic process and volumes change from time to time it is still an indication of how the market are regulated with South African producers forced to export higher volumes.

The basis for access was revised in 2011/12 to a fixed quota, based on the historical quota tonnages supplied by the same non-SACU SADC producers to the SACU market. These quotas are increased annually by a growth factor linked to growth in the SACU market. This revision was undertaken to prevent the value inherent in the quotas being undermined by the disappearance of any world market exposure for the non-SACU SADC producers, due to their increased preferential access to the EU market.

4.3 Marketing Arrangements – Export

Global market distortions also threaten the maintenance of a profitable and sustainable sugar price on the export market as many countries apply a policy of restricted entry to their domestic market. Entry is regulated through "preferential quotas" and import tariffs. The net result of this is that less than 20% of the world's export sugar is traded on the open

market. South Africa has to sell nearly its total export volume on this market, except for around 30 000 tons (2012) that is sold under a preferential quota in the USA. The profitability of the industry's exports to the world market is from time to time severely affected by a subsidy-induced oversupply of global demand. The South African sugar industry exports approximately 30% of its sugar production to the world market at prices substantially below the domestic sugar price. In order to distribute exposure to the world market equitably amongst growers and millers, a redistribution of proceeds is effected via the South African Sugar Association. The Sugar Act and the Sugar Industry Agreement provide regulatory support for the redistribution of proceeds.

Government's strategic support for the South African sugar industry recognizes the distorted nature of the world market for sugar, and the severe impact of producer support measures on price determination on the global market. Based on these considerations government support includes intervention in the following three areas:

- Tariff protection against disruptively low world sugar prices;
- Provision for the establishment of equitable export obligations for millers and growers; and
- The Sugar Cooperation Agreement between the members of the Southern African Development Community.

The South African Government's support in these areas is endorsed in the Department of Trade and Industry's Strategy for the Optimal Development of the Sugar Industry within a South African Customs Union (SACU) and SADC Context (revised in 2011). This Strategy calls for ongoing support for the industry in these crucial areas.

4.4 Pricing

The whole pricing system in the industry is part free market and part regulated and the different comprising elements will be discussed in the following sections.

The price chain for sugar marketing can be presented by the following diagram:

- 1. Farm Value
- 2. Milling Cost
- 3. Refining Cost
- 4. SASA Levy (Paid by the cane producers and millers in relation to DoP) 15
- 5. Ex Refinery Bulk Cost = 1+2+3 +4
- 6. Warehousing/Handling
- 7. Marketing and Distribution
- 8. Packing Cost
- 9. Working Capital Costs
- 10. Packed Cost at Point of Supply = 5+6+7+8

¹⁵ Division of Proceeds

After point 10 takes place discounts and rebates to determine the "Millers Net Selling Price" and eventually the retail price which is paid by the shopper.

4.4.1 Division of Proceeds

The division of proceeds between the millers and the cane producers determine the net payment to the producers and the millers.

Total proceeds from the sale of local market and export market sugar and molasses are accounted for to the South African Sugar Association. After deduction of industrial charges, the net divisible proceeds are shared between growers, millers and refiners in terms of a fixed division of proceeds provided for in clause 166 of the Sugar Industry Agreement (SIA). The final adjustment in respect of the division of proceeds, which was reviewed between Millers and Growers towards the end of 2004/05, was implemented during the 2009/10 season. In terms of this review, Growers receive 64.3675% of the sugar industry proceeds and hence contribute 64.3675% of the costs of the activities of SASA. Adjustments implemented in terms of the review, are indicated in the table below.

| Season | DoP Change | Grower share |
|---------|------------|--------------|
| 2006/07 | +0% | 63.7675% |
| 2007/08 | +0.3% | 64.0675% |
| 2008/09 | +0% | 64.0675% |
| 2009/10 | +0.3% | 64.3675% |

Table 7: Finalisation of Division of Proceeds (DoP)

This agreement has brought to an end the annual negotiations between Cane Growers and the Millers over the division of proceeds.

The following Diagram show the process follows to reach the net divisible proceeds level.

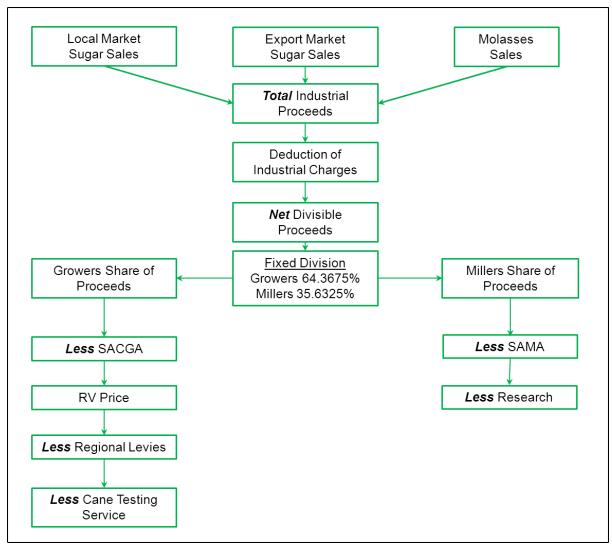


Diagram 3: Division of Proceeds

In the above Diagram a number of issues are presented that need explanation namely:

- Local Market Price Determination;
- Molasses Price and Sales;
- o RV Price;
- o Regional Levies, Cane Testing Service and Extension.

4.4.1.1 Local Market Price Determination

The local market price determination is discussed for Domestic Households and Industrial use separately.

4.4.1.1.1 "Household" Sugar Price

At present the Sugar Act of 1978 (as amended) and the Sugar Industry Agreement (SIA 2000) provide for the three main regulatory provisions within which the pricing of refined sugar in SA takes place:

- (a) An import tariff that is set relative to a US dollar-based reference price;
- (b) A single channel export mechanism, and
- (c) A local market proceeds-sharing agreement whereby proceeds earned by the SA sugar industry are divided amongst growers and millers according to the agreed set formula. In the following text box the tariff situation is explained.

The reference price is at present fixed at US\$ 358 per ton (US 14.97cents/lb). This is based on the long-term average London No 5 white sugar price, adjusted upwards to allow for depressed world prices due to "protectionist policies" employed around the world, and adjusted downwards to reflect the freight costs incurred by the importers.

The tariff is calculated as the difference between the reference price and a monthly average of the London No 5 price. If the average London price is US\$ 180 per ton, the level of the tariff would adjust to \$358 - \$180 = \$178. Where this difference is negative or zero, the tariff rate is set at zero.

The tariff rate is then converted to rand at the prevailing exchange rate and applied to imports of all types of sugar.

The Department of Trade and Industry (DTI) and the Board on Tariffs and Trade (BOTT) has up till now remained committed to the setting of an import tariff due to the distorted nature of the world sugar market.

Numerous studies estimate that the long-term world price of refined sugar would be close to 60% higher without market intervention (ITAC, 2009). In the next table the average gross "World Sugar" price as received by SASA is presented.

| | | Average Front | Average Front | | Average |
|---------|---------------------------------------|---------------|---------------|----------|-------------|
| | | Price | Price | Exchange | Front Price |
| Season | Period | US cents/lb | US \$/ton | Rate | Rand/ton |
| 1996/97 | 1 Apri 1996- 31 Mar 1997 | 11.09 | 244.43 | 4.30 | R 1 050.16 |
| 1997/98 | 1 Apri 1997- 31 Mar 1998 | 11.32 | 249.49 | 4.61 | R 1 149.46 |
| 1998/99 | 1 Apri 1998- 31 Mar 1999 | 7.87 | 173.48 | 5.53 | R 959.59 |
| 1999/00 | 1 Apri 1999- 31 Mar 2000 | 5.80 | 127.82 | 6.11 | R 780.95 |
| 2000/01 | 1 Apri 2000- 31 Mar 2001 | 9.18 | 202.36 | 6.94 | R 1 404.41 |
| 2001/02 | 1 Apri 2001- 31 Mar 2002 | 7.61 | 167.73 | 8.60 | R 1 442.45 |
| 2002/03 | 1 Apri 2002- 31 Mar 2003 | 6.84 | 150.80 | 10.52 | R 1 586.39 |
| 2003/04 | 1 Apri 2003- 31 Mar 2004 | 6.43 | 141.65 | 7.56 | R 1 070.90 |
| 2004/05 | 1 Apri 2004- 31 Mar 2005 | 8.12 | 178.87 | 6.45 | R 1 153.72 |
| 2005/06 | 1 Apri 2005- 31 Mar 2006 | 12.03 | 265.07 | 6.36 | R 1 685.83 |
| 2006/07 | 1 Apri 2006- 31 Mar 2007 | 13.05 | 287.54 | 6.77 | R 1 946.67 |
| 2007/08 | 1 Apri 2007- 31 Mar 2008 | 10.38 | 228.87 | 7.05 | R 1 613.53 |
| 2008/09 | 1 Apri 2008- 31 Mar 2009 | 12.15 | 267.79 | 8.25 | R 2 209.30 |
| 2009/10 | 1 Apri 2009- 31 Mar 2010 | 20.78 | 458.10 | 8.43 | R 3 861.76 |
| 2010/11 | 1 Apri 2010- 11 Mar 2011 [#] | 23.98 | 528.42 | 7.51 | R 3 968.44 |

Table 8: Average Price Received by SASA for Export Sugar on the World Market.

The table show the large variations in world prices and also the important influence of the exchange rate on the final price. The average world price increased by US 3.20 cents/lb or 15.4% while the South African rand price only increased by R106.68 or 2.8% from the 2009/2010 season to 2010/2011 season.

The resulting situation because of the above can be summarised as follows in the setting of refined sugar prices is as follows:

- The Department of Trade and Industry "set" a reference price for the mills selling the refined sugar to the packing units and eventually to the wholesaler and retailers,
- The sugar is then delivered to the packing units, which is responsible for the packing and marketing

Effectively the result is that the different companies compete only in terms of market share in the household refined and industrial sectors, as milling and refining costs is very similar for the different mills and refineries.

4.4.1.1.2 Industrial Sugar Price

With the introduction of the revised Sugar Industry Agreement in 2000 (SIA 2000), SASA now has no statutory authority to set the industrial sugar price, and the millers' pricing decisions (reflected by the miller net selling price) are now influenced by the import tariff

and the structure of the local market for refined sugar. In this market the three main players - Tongaat-Hulett Sugar Limited, Illovo Sugar Limited and Tsb Limited- dominate as they produce about 100%, of total sugar output into the industrial market Industry representatives indicate, however, that supplies of sugar from neighbouring

Industry representatives indicate, however, that supplies of sugar from neighbouring countries, particularly Swaziland, in recent years have put downward pressure on the local prices of refined and industrial sugar.

4.4.1.2 Molasses Price and Sales

Molasses proceeds forms part of the Division of Proceeds pool, which is shared between millers and growers. Molasses is therefore a component of the sugarcane price paid by milling companies to growers. Molasses proceeds, for Division of Proceeds purposes, comprise local market proceeds valued at the notional price and export proceeds which are valued at the actual prices realised on an ex-factory basis. The notional price is a "proxy price" for the ex-factory local market value of molasses. The notional price is determined by the Council of SASA and the requirement to determine the notional price is part of the provisions of the Sugar Industry Agreement. SASA does not sell molasses, which is a product which belongs to milling companies. It is up to the milling companies to determine the actual selling price of molasses to their customers. Currently, all molasses is sold on the local market. The industry has at times been a significant exporter of molasses but this has changed in recent years as molasses production has fallen and there has been a rapid growth in the fermentation industry in South Africa. Milling companies have significant downstream production facilities which utilise molasses for fermentation and animal feed production. Only a portion of the total molasses produced in South Africa is sold on the local market given the milling companies own requirements.

Molasses is traded freely on the local market, there is no tariff protection and there is no commodity exchange where price formation or hedging can occur. There is no international molasses commodity exchange. Molasses is imported into South Africa from within SACU and SADC.

4.4.1.3 RV Price

At the start of the 2000/01 season, the Recoverable Value (RV) payment system replaced the sucrose payment system. The RV system recognizes the effect of Sucrose % cane, Nonsucrose % cane and Fibre % cane on sugar production. The effect of these factors on sugar production in the factory is illustrated in the following diagram.

The RV formula is the format below and the different coefficients explained.

RV% = S - dN - cF.

Where S= Non sucrose % cane delivered,

F = Fibre % cane delivered

And d = The relative value of sucrose lost from sugar production per unit of non-sucrose.

c = The loss of sucrose from sugar production per unit of Fibre.

The "d" and "c" factors are approximately 0.42 and 0.02 respectively indicating the higher importance of non-sucrose on cane quality relative to fibre. The "c" factor is calculated annually based on a three season rolling average. The "d" factor is calculated monthly and is based on a three season rolling average and current sugar and molasses price estimates. Therefore, a grower's RV % cannot be compared from one month to the next to monitor agronomic performance because the RV % is derived from the industrial prices of sugar and molasses; parameters that change monthly and cannot be controlled by individual growers. Growers should rather monitor the separate cane quality parameters, viz sucrose, non-sucrose, fibre and others.

Cane quality or RV % cane is increased by increasing maturity, freshness and cleanliness of the cane delivered to the mill

A provisional recoverable value price is declared monthly during the season which is applied to all cane delivered to date. A final RV price for the season is declared in March of each year.

From the above it is obvious that the aim of the system is to encourage producers to supply good quality cane to the mills.

4.4.1.3.1 Regional Levies and Cane Testing Service (CTS)

In the present DTI agreement between the millers and the cane producers the cane producers provide 64.3675% of the funds needed to fund SASA and the millers the balance. The regional levies are used by mill board areas to fund local producer related activities and is unrelated to the industry levies. Producers are also expected to pay for the cane testing service at the time of delivery of cane.

4.4.1.4 Determination of Notional Price¹⁶

In the following a table a summary of the determination of the notional price up to the end of February 2011 is presented.

| | | Local Market | 75% | R7 057 mil. | |
|----------------|-----------------|------------------------|------------------|--------------|-------------|
| Saleable Sugar | 1.91 tons | Export Market | 25% | R1 214 mil. | |
| Molasses | 0.71 tons | | | R302 mil. | |
| | | | Gross | R8 484 mil. | |
| | | | Industrial Costs | R259 mil. | |
| | | Net Divisible Proceeds | | R8 224 mil. | |
| Growers Share | 64.3675% | R5 294 mil. | Millers Share | 36.6325% | R2 930 mil. |
| | Less S.A.C.G.A. | R28 million | | | |
| Notional Price | Growers | R2 755.21/ton | Millers | R1525.23/ton | |
| RV Price | Growers | R2 550.20 | | | |

¹⁶ Notional Price refers to the proxy (academic) price determined in the division of the net proceeds and is based on the volume of saleable sugar sold.

The above table show that the although 75% of the sugar volume sold is in this specific year is in the domestic (SACU) market it represents 82% of the income to the sugar pool, the export market 14% and the molasses 4%. The RV price represents roughly 92% of the notional price set for growers.

5 Closing Remarks

The Sugar Industry operates within an institutional structure that has developed over time within the different regulatory parameters as established over time. The cane producers and millers are represented on equal terms in the South African Sugar Organisation (SASA). The cane producers have developed an organisational structure in the South African Cane Growers' Association (SACGA) which represents the large scale and small scale producers effectively. The millers are organised in the South African Sugar Millers Association (SASMA), which represents the millers in the SASA structures. Some progress has also been made in promoting Black Economic Empowerment (BEE) with black groups acquiring major shareholding in two of the mills.

Using the institutional structures the industry is self-funding as far as research is concerned, runs an extensive extension service, manages a development fund assisting new entrees into the industry and simultaneously assists with education facilities, health and welfare services in the rural areas.

Within existing Governmental policies an efficient functioning market structure and price forming mechanism is maintained. This has made it possible to negotiate effectively for the industry in a changing SACU and SADC neighbourhood. However the need to adapt to a changing marketing regime will put extra responsibility on the institutional structure under the establishment of a Tripartite FTA and on-going distortions to the world market. At present the SACU market is managed as a single entity with an import tariff that does not usually deliver any applied tariff above zero. The establishment of a full free trade area in the SADC or Tripartite regions can especially put the cane producers under pressure, not so much the millers as two of the South African companies are already milling in a number of SADC countries. The establishment of a full FTA for sugar in the SADC region would similarly put pressure on the RSA domestic prices due to world market distortions, forcing them down, which would impact negatively on the cane producers.

As reported in Section 3.1 above, the industry plays a very important role in the economic landscape of the country, especially in the rural areas. The estimation is that around 113 000 workers are involved in the sector with around 600 000 people depending on the well-being of the industry. Coupled to this is the progress made with land redistribution in free hold areas, it is estimated that around 21% of the target of 30% has already been transferred. About 70 600 hectares of freehold land has been transferred to about 1 300 black farmers. Major changes in the marketing and pricing structures might in future impact very negatively on these farmers, who are often short of reserve capital and without the long term experience of the other producers. The same applies to the many thousands of small scale farmers whose profit margins are very small and any major changes might affect them very negatively.

Bibliography

- Draft Report on Establishing the Tripartite Free Trade Area, published by The Tripartite Coordination Mechanism in November 2009; ITC MacMap and ISO (August 2010, tons raw value).
- o SASA Industry Directory 2010-2011, 2011/12.
- o South African Cane Growers' Association 2009/10 Report.
- SASA Publications.
- o The Cane Grower April 2009.
- o Engineering News: SA to study SADC, Comesa, free trade area.
- Internet: One Free Trade Area; Sugar in the proposed SADC-EAC Tripartite FTA.
- The South African Agricultural Baseline: Bureau for Food and Agricultural Policy - 2010: Sugarcane and Sugar.
- SADC Secretariat: Evaluation of an Appropriate Model for a SADC Customs Union- Policy Brief: September 2007.