

Sugar





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NOTES

- Usukhela Milling (Pty) Ltd is owned by Illovo Sugar Ltd, and has sold shares to a black empowerment company.
- Sugar Milling Companies also own sugar estates that produce 12 % of the total crop.
- Union Co-op Ltd also owns a maize mill and a saw mill.
- Three giant companies in this industry are Illovo, Tongaat-Hulett and TSB.
- TSB owns five refineries that are known as white end mills, they produce their own refined sugar.
- Raw sugar produced at remaining mills is routed to Durban where it is refined at central refinery mills.
- In order to enter the industry, a potential grower must first come to an agreement with a miller to mill their cane.
- Molatec and Voermol are two animal feeds operations that use by-products from cane.
- Ordering of raw cane led by Coca-Cola has greater influence on changing of prices.

KEY ABBREVIATIONS

SACGA = South African Cane Growers' Association

SAMA = South African Millers' Association

SASA = South African Sugar Association

TSB = Transvaal Sugar Limited

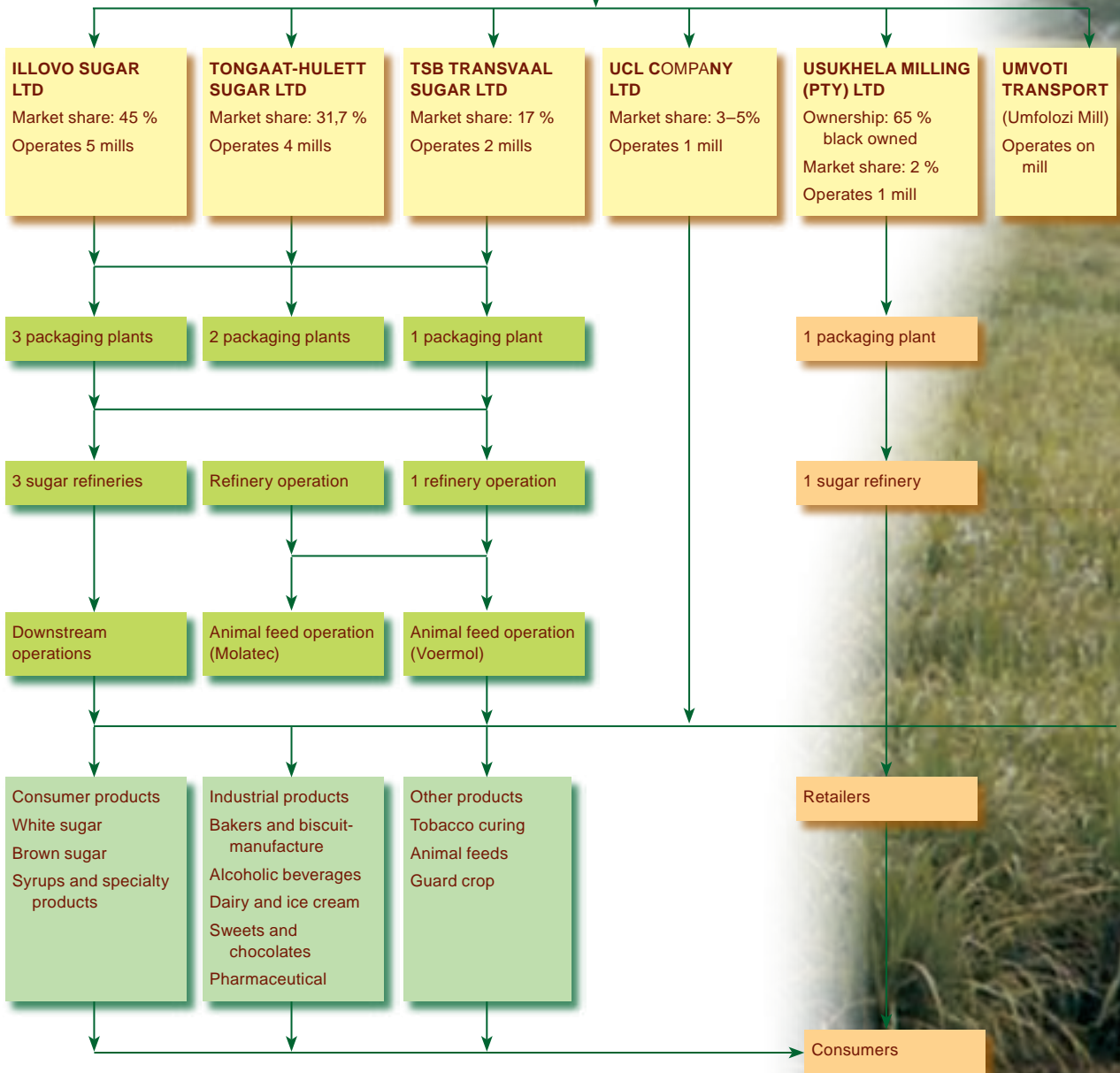
COMPETITORS

Brazil, Thailand, EU, Australia, India, China, USA and Cuba

SUGAR INDUSTRY PROFILE

CANE PRODUCTION

- Area: 430 000 ha, 31 000 ha owned by blacks
 - Commercial growers: 1 741
 - Developing farmers: 47 344
 - Total production: 27 million tons
- Commercial delivered: 75 % of the total
 Small scale: 13 % of the total
 Sugar estates: 12 % of the total
- Foreign earnings: R6 billion
 Employment: 85 000 workers
 Milling: 11 000 workers
 Direct and indirect employment: 350 000 jobs





COMMODITY PROFILE

Sugar

1. DESCRIPTION OF THE INDUSTRY

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 sugar-cane cultivation with the industrial factory production of raw and refined sugar, syrups and specialised sugars, and a range of by-products. Based on revenue generated through sugar sales, in the SACU region and world market exports, the South African sugar industry is responsible for generating an annual average direct income of R6 billion. The South African sugar industry contributes an estimated average R2 billion to the country's foreign exchange earnings on an annual basis. The industry is regulated in terms of the Sugar Act and the Sugar Industry Agreement, which are binding on all sugar-cane growers and producers of sugar products. The contribution of the sugar industry to the Gross Value of Agricultural Production can be summarised in Fig. 1 as follows:

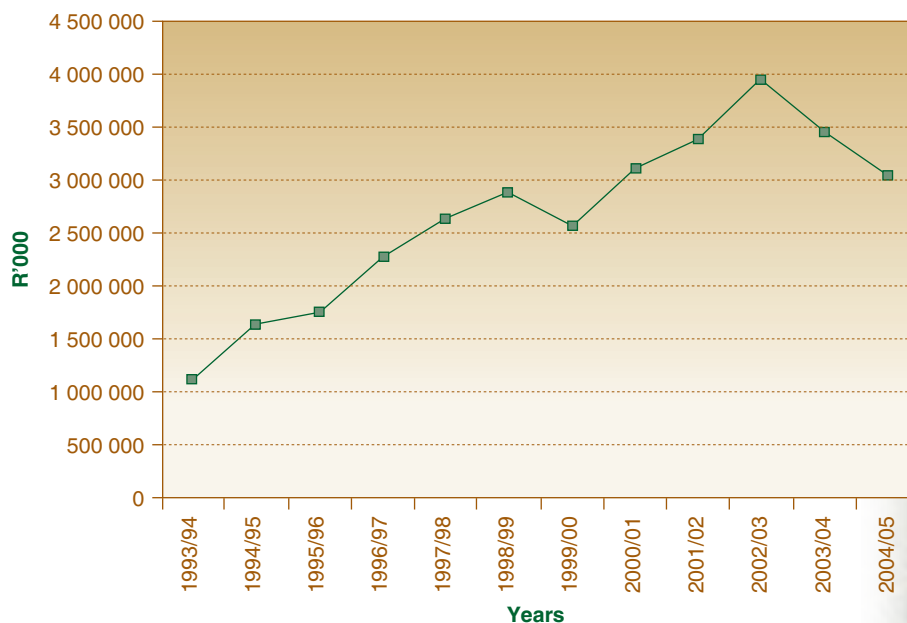


FIG. 1. Sugar—Gross Value of Production

Source: Directorate of Agricultural Statistics, Department of Agriculture

The decline in the contribution of sugar to the GVP between 1999 and 2001 can be attributed to a strong rand against the dollar. Rainfall across the entire industry was below expectation up to the 2004/05 season resulting in the smallest crop since 1995/96.

1.1 Production areas

Sugar cane in South Africa is grown in 14 cane-producing areas extending from Northern Pondoland in the Eastern Cape Province through the coastal belt and KwaZulu-Natal midlands to the Mpumalanga lowveld. Of the 430 000 ha currently under sugar cane, about 68 % is grown within 30 km of the coast and 17 % in the high rainfall areas of KwaZulu-Natal. The balance is grown in the northern irrigated areas that comprise Pongola and Mpumalanga lowveld.

1.2 Production

On average 22 million tons of sugar cane are produced each season from 14 mill supply areas, extending from Northern Pondoland in the Eastern Cape to the Mpumalanga Lowveld. Of the 49 085 registered sugar-cane growers 47 344 are small-scale growers mainly on tribal land of whom 23 577 delivered cane for crushing in 2004/05, accounting for 11,65 % of the total crop. This results in a cash flow of approximately R600 million flowing into the deep rural areas to small-scale growers and their service providers, many of

whom are local small-scale contractors. With the focus on empowerment of previously disadvantaged people, a growing number of black growers are entering sugar-cane farming on commercial farms made available at market related prices by the major milling companies and other sellers of freehold land. Post 1994 purchases of freehold land created more than 200 black commercial growers in the sugar industry, who own 40 000 hectares, or 11 % of freehold land under sugar cane. An additional 70 000 hectares under sugar cane are already being farmed by small-scale black growers on tribal land. In total there are 1 741 commercial growers (inclusive of the more than 200 new black commercial growers) who produce 75 % of total sugar cane-production. Milling companies with their own sugar estates produce 10,11 % of the crop. The percentage of these miller-cum-planter estates has decreased in recent years and is likely to continue doing so as the companies promote black farming development.

The area under cane production in SA since 2000 has remained constant at around 430 000 hectares. While the total area under cane expanded

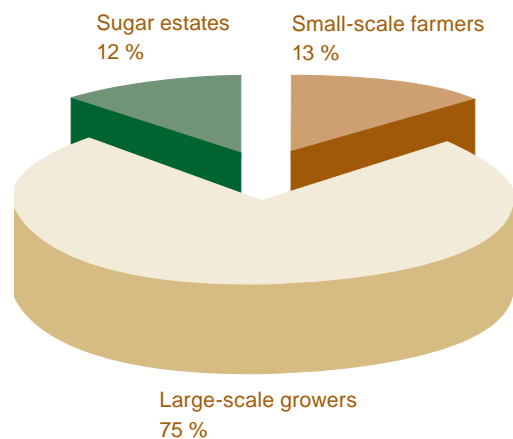


FIG. 2. Sugar production in SA

Source: South African Sugar Association



TABLE 1. Sugar cane: area planted, cane production and sugar production

| Year | 1995/96 | 1996/97 | 1997/98 | 1998/99 | 1999/00 | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Area planted (1 000 ha) | 394 | 411 | 421 | 417 | 422 | 429 | 432 | 430 | 427 | 429 | 428 |
| Cane pro- duction (1 000 tons) | 16 714 | 20 951 | 22 155 | 22 930 | 21 223 | 23 876 | 21 157 | 23 013 | 20 419 | 19 095 | 21 048 |
| Production of sugar (1 000 tons) | 1 667 | 2 269 | 2 412 | 2 646 | 2 532 | 2 729 | 2 400 | 2 763 | 2 412 | 2 235 | 2 502 |

Source: Directorate Agricultural Statistics, Department of Agriculture

in the mid-90s, primarily as a result of the establishment of the Komati Mill in Mpumalanga and the relocation of the Illovo Mill to its current site in Eston, where development is not constrained by urbanisation as was the case in the coast, no further significant expansion has taken place. The area under sugar cane, being a perennial crop is less subject to fluctuations compared to other crops.

Cane yields per hectare have remained at historic levels but the adoption of the Recoverable Value price system for cane payments, which incentivises good agricultural practices, has resulted in improved sugar yields per hectare.

1.3 Employment

The sugar industry makes an important contribution to direct employment in sugar-cane production and processing, and provides indirect employment for numerous support industries in the three provinces where sugar cane is grown—KwaZulu-Natal, Mpumalanga and the Eastern Cape—in sectors such as fertiliser, fuel, chemical, transport, food and services.

Direct employment within the sugar industry is approximately 85 000 jobs. Direct and indirect employment is estimated at 350 000 people. There are approximately one million people dependent on the sugar industry in South Africa. The sugar milling sector of the industry employs 12 751 people in 14 sugar mills.



2. MARKETING STRUCTURE

2.1 Domestic market and domestic sugar prices

As members of the South African Customs Union (SACU), the total domestic market comprises of sales into all SACU countries. The South African industry's access to the SACU market has dwindled from 95 % in the early 1990s to 74 % currently. The total SACU demand is met by supply from SACU producing countries, bilateral arrangements between non-SACU countries and SACU countries, and from access granted to non-SACU-SADC surplus sugar producing countries in terms of the SADC Protocol.

Sugar prices in SACU are established in a regulated environment driven off a dollar-based reference price system, which determines the duty payable on sugar imports into SACU. This system was put in place by the Department of Trade and Industry in 2000. Millers, who sell the sugar domestically, compete against each other for market share in the direct and indirect (industrial) markets. Millers also face competition from sugar from SADC countries in terms of the SADC Free Trade Agreement, as well as from Swaziland.

The dollar-based reference price system was established by the dti on the basis of a 10-year average of the No. 5 world refined sugar price adjusted for certain elements. Outlined below as Table 2 are recent recoverable value (RV) prices paid by millers to growers together with the cane price at average recoverable values for the industry:

TABLE 2. Prices paid to growers

| Year | Recoverable Value (RV) Price | Cane price (R/ton) |
|-----------|------------------------------|--------------------|
| 1998-1999 | 1 046,62 | 125,85 |
| 1999-2000 | 971,09 | 121,36 |
| 2000-2001 | 1 105,00 | 130,50 |
| 2001-2002 | 1 352,14 | 160,23 |
| 2002-2003 | 1 368,79 | 171,78 |
| 2003-2004 | 1 357, 01 | 169,08 |
| 2004-2005 | 1 297,19 | 159,55 |

Source: South African Sugar Association



At the start of the 2000/01 season, the Recoverable Value (RV) payment system replaced the sucrose payment system. The RV system recognises the effect of sucrose % cane, non-sucrose % cane and fibre % cane on sugar production. Cane quality or RV % cane is increased by greater maturity, freshness and cleanliness of the cane delivered.

Domestic sugar prices have historically tended to increase at below the consumer price index. In 2003 sugar prices have decreased with millers reporting a 7 % decline following the strengthening of the rand. In general, ex-factory sugar prices have remained unchanged since 2003 owing to the ongoing strength of the rand.

Prices in any year are impacted by revenues earned in the various markets but are also impacted by the size of the crop, whereby larger crops depress prices owing to the larger percentage of export sugar in the calculation and smaller crops increase prices owing to the smaller proportion of export sugar. RV prices have lagged behind CPI and in recent seasons prices have been flat owing to the strength of the rand.

2.2 Exports

Altogether 50 % of the 2,5 million tons of sugar produced in South Africa per season is marketed in SACU, which comprises South Africa, Swaziland, Lesotho, Botswana and Namibia.

The remainder is exported to various markets in Africa, the Middle East, the Far East (Korea and Japan), North America and Asia. During the 2002/2003 marketing season 26 % of sugar was exported to Japan, 23 % to Korea while 13 % was exported to Malaysia.

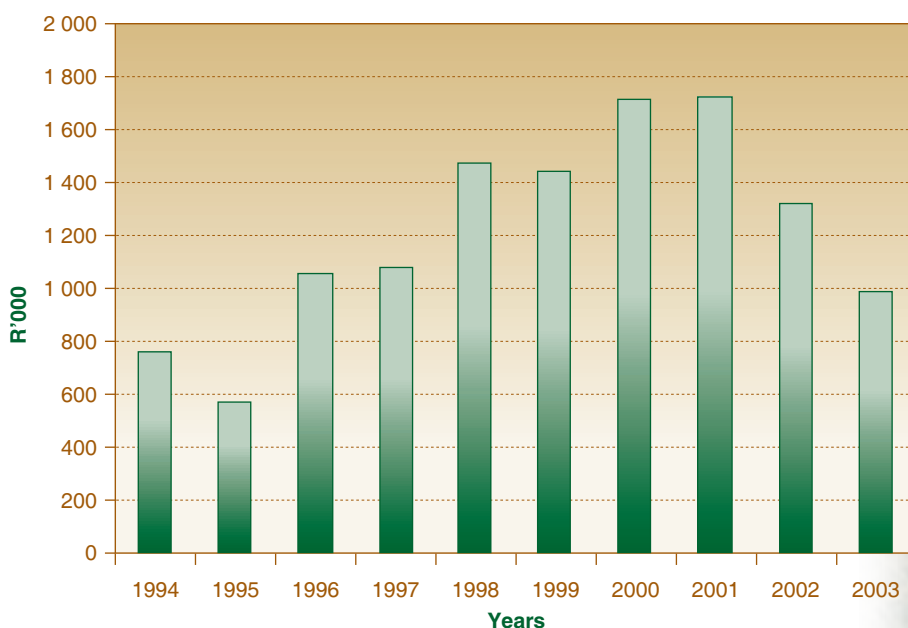


FIG. 3. Total sugar exports

Source: Directorate Agricultural Statistics- Department of Agriculture

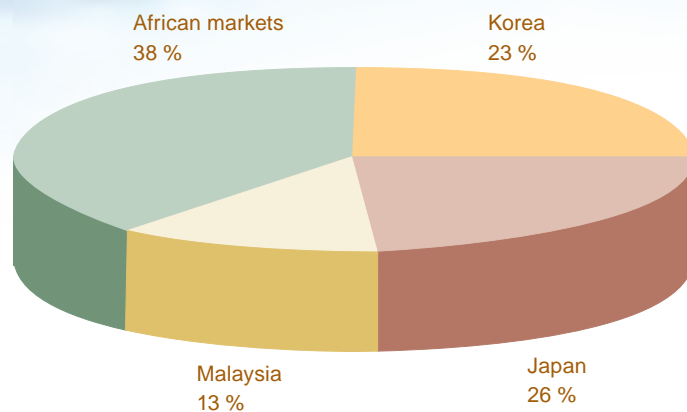


FIG. 4. Sugar export destinations
 Source: South African Sugar Association

In 2004/2005 South Africa exported 1 016 453 tons of sugar. Raw sugar exports are predominantly to the Far East and Middle East refineries, while refined sugar is shipped to East and Central Africa and to the Near East, i.e. Malaysia, India, Sri Lanka and Bangladesh. The industry competes directly with Brazil, Thailand, Australia and Guatemala for raw sugar markets, and with refineries in the EU (subsidised sugar exports) and the Middle East, i.e. Dubai and Saudi Arabia, for refined sugar markets.

2.3 Processing and milling

Sugar cane is milled in 14 sugar mills situated in KwaZulu-Natal and Mpumalanga. There are six sugar milling companies in South Africa, viz:

Illovo Sugar Ltd – operates five sugar mills in South Africa, two of which have refineries and three with packaging plants. It has four cane growing estates and produces a variety of downstream products.

Tongaat-Hulett Sugar Ltd – operates four sugar mills, two packaging plants, a central refinery in Durban, various sugar estates and an animal feeds operation.

Transvall Sugar Ltd – operates two sugar mills, a refinery and a packaging plant, sugar estates, cane and sugar transport enterprises, and an animal feeds division.

The UCL Company Ltd – previously known as Union Co-operative Ltd has recently converted to a company. The company also operates a wattle extract factory, a maize mill, a saw mill, a payroll division and a trading division.

Umvoti Transport (Pty) Ltd – a black empowerment grouping, owns the Umfolozi mill, located in the Umfolozi region on the North Coast of KwaZulu-Natal. The operation consists of a sugar mill only.

Ushukela Milling (Pty) Ltd – a black empowerment grouping owns the Gledhow Mill, located on the North Coast of KwaZulu-Natal. The operation comprises a sugar mill, refinery, packaging plant and a sugar estate.



Harvested sugar cane is transported to the sugar mills where it is washed and fed into machines for shredding. The chopped fibre is mixed with water and pressed to produce **cane juice**. The fibrous mass left after pressing is known as **bagasse**, and is used as animal feed, to make paper or as fuel to generate energy. The cane juice is then treated with lime and hot water to make it less acidic and prevent it from changing into glucose or fructose. The juice goes to a purifier to remove impurities.

After further heating and filtration, the juice goes to the evaporator and vacuum pan where much of the remaining water is removed, leaving **syrup** behind. As the syrup cools it forms crystals. The mixture is put in a centrifuge, leaving the crystals behind. **Molasses**, a thick, dark fluid rich in vitamins and minerals, is used as cattle feed and to make brewer's yeast and alcoholic drinks such as cane spirits.

The raw sugar crystals will still have some molasses stuck to them and are sent to the refinery for further processing. The molasses are removed by soaking the raw sugar in a solution so saturated with sugar that none of the raw sugar crystals can dissolve. The crystals are then dissolved in water and the solution is filtered to remove impurities.

The **syrup** then has the entire remaining colour removed from it in a bed of activated charcoal. After this complex process the sugar is crystallised again and the crystals are tumbled in a machine until pure **white sugar** is obtained.

3. MARKET VALUE CHAIN

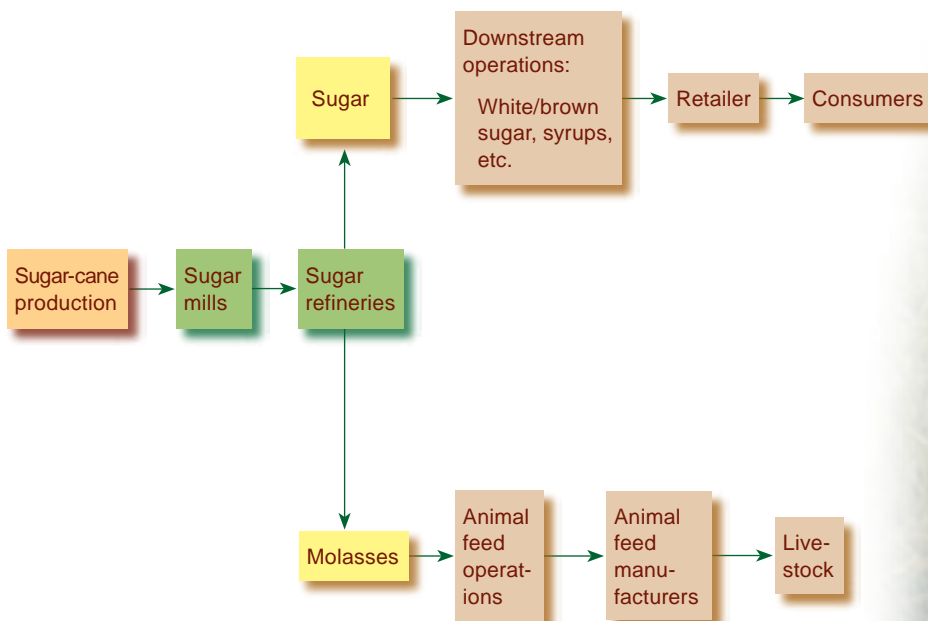


FIG. 5. Market value chain for sugar



4. EMPOWERMENT ISSUES AND TRANSFORMATION IN THE SECTOR

With the growth of economic development and empowerment of previously disadvantaged people, a growing number of medium-scale farmers are continuing to enter sugar-cane production on farms made available at market-related prices by the major milling companies.

A New Freehold Grower (NFG) programme, which evolved through the Ithala Development Finance Corporation Limited and sugar millers Illovo Sugar Limited and Tongaat-Hulett Group opened doors to previously disadvantaged individuals owning and operating their own commercial sugar farms. The scheme provided for coordinated redistribution of farmland within the sugar industry and assists in balancing the demographics of suppliers of cane to sugar mills. Currently the scheme supports a total of 120 medium-scale sugar farmers, 68 as a result of Illovo Sugar Limited interventions and 52 through the Tongaat-Hulett Group's actions.

Inkezo, a land reform company was established in 2004 as an initiative developed by growers and millers in the South African sugar industry. The primary objective is to effect the transfer of 80 000 ha of land in the sugar industry over and above the 31 000 ha of freehold land already established under black ownership.

The *Small Grower Development Trust (SGDT)* was established in 1992 to provide a facility focusing on the procurement and administration of funds, facilitating and funding the training requirements of small-scale growers.

The mandate and objectives of the SGDT are to provide assistance to small-scale growers in terms of sugar-cane development, improvement and expansion of cane-growing enterprises.

Umthombo Agricultural Finance (UAF), an internal financial assistance facility, provides funding to developing farmers located in Tribal Authority areas and other developing farmers who are not able to access finance from the Land Bank or the commercial banking sector. UAF has a loan book of R250 million and has made over 45 000 loans to developing farmers since its inception.

In 1996, a KwaZulu-Natal development agency, the Ithala Development Finance Corporation Limited, sugar industry giants, Illovo Sugar Limited and the Tongaat Group, and the South African Cane Growers' Association jointly launched an empowerment initiative to open doors to previously disadvantaged individuals owning and operating their own commercial sugar farms. The scheme provided for coordinated redistribution of farmland within the sugar industry and assisted in balancing the demographics of suppliers of cane to mills.

5. LOCAL BUSINESS OPPORTUNITIES AND CHALLENGES

The SACU comprises South Africa, Swaziland, Lesotho, Botswana and Namibia. Domestic sugar prices in the SACU remain substantially below those of the developed nations.

The sugar industry in South Africa is facing the following challenges at present:

- 5.1 The strengthening of the rand against the dollar.
- 5.2 Cost push pressures since the year 2000 that have rendered the industry less competitive in US dollar terms.
- 5.3 The world market price being generally low owing to subsidy induced over-supply in the world market and little movement in world sugar trade liberalisation.
- 5.4 Poor rainfall in many parts of the sugar-cane belt.

Sources

- South African Sugar Association
- South African Cane Growers' Association
- South African Sugar Millers' Association
- NAMC. *Transformation in the Agricultural Sector: A Section 7 Committee Investigation* – draft document.
- Directorate of Agricultural Statistics, Department of Agriculture



6. SUGAR MILLERS

6.1 Illovo Sugar Limited

Illovo Sugar Park
1 Montgomery Drive
Mount Edgecombe

P.O. Box 194
Durban
4000

Contact person: H.R. Hackmann

Tel: (031) 508 4345
Fax: (031) 508 4499
Website: www.illovo.co.za



6.2 Tongaat-Hulett Sugar Limited

Amanzimnyama Hill Road
Tongaat

Private Bag 3
Glenashley
4022

Contact person: P.D. McKerchar

Tel: (032) 439 4307
Fax: (032) 439 4392
Website: www.tongaathulett.co.za

Tongaathulett Sugar Refinery
444 South Coast Road
Rosburgh
4094

P.O. Box 1501
Durban
4000

6.3 UCL Company Limited

Dalton Mill
P.O. Box 1
Dalton
3236

Contact person: H.W. Rencken

Tel: (033) 501 1600
Fax: (033) 501 1187



6.4 Usukhela Milling (Pty) Ltd

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6.5 Transvaal Sugar Limited (TSB)

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7. ACKNOWLEDGEMENTS

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