

**KEY ISSUES FACING SUGAR INDUSTRIES  
IN THE SOUTHERN AFRICAN  
DEVELOPMENT COMMUNITY**

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## I. INTRODUCTION

Of the twelve countries that are signatories to the Protocol on Trade in the Southern African Development Community (SADC), nine of them are involved in the growing and milling of sugarcane (hereafter referred to as the sugar industry). In each country, the sugarcane growing and milling activities play an important socio-economic role. At the same time, there are severe distortions existing within individual SADC sugar markets as well as global sugar markets. We shall refer to these distortions (which have different implications for the various SADC sugar industries) as internal and external, respectively.

The objective of this paper is to use the internal and external distortions as a backdrop for highlighting the key issues facing SADC sugar industries. To this end, a conceptual framework whose central pillar is the existence of market distortions will be presented in Section II of this paper. It will be followed in Section III by a description of the characteristics of the SADC sugar industries and the kind of distortions that they face in the real world. In Section IV will be presented the main features of the SADC Sugar Cooperation Agreement which is a response to, among other things, existing distortions. In Section V will be presented a consolidated list of key issues facing the SADC sugar industries as thrown up by the analysis in the previous three sections. Finally, Section VI will summarize the major conclusions of the paper.

## II. CONCEPTUAL FRAMEWORK

The SADC Protocol on Trade provides for the free movement of goods and services over varying time frames. Exempted from this free movement provision are “sensitive products” which were selected on account of their strategic importance, peculiar characteristics or high profile in the economies of the countries concerned. Sugar is one of these sensitive products. The question is how should the movement of sugar be determined in the light of its sensitive nature without ignoring the principles of efficiency and equity. It is in the process of answering this question that the key issues facing sugar industries in SADC will emerge.

The categorization of sugar as a sensitive product can be rationalized on the basis of three major considerations. The first is the existence of severe distortions in the form of tariff and non-tariff barriers surrounding various markets in the different regions of the world. The end result of these distortions is that sugar trade is not governed by price signals generated by the interaction of the normal laws of supply and demand. Under such conditions, a country may be highly cost-competitive, but would not be able to access high-cost countries because of barriers to trade. In the extreme case, an efficient sugar industry may end up being driven out of production by an inefficient one which happens to be either well protected or well supported by its government.

The second consideration is that sugar is a political commodity. At a basic level, people need something sweet to make food (a basic needs commodity) palatable; otherwise there would be a lot to grumble about ultimately casting the government of the day in a very

poor light. At a higher level, sugar features prominently in the policy-making of all the SADC countries – irrespective of stage of development. Even the most advanced country in the region (namely, South Africa), is on record as having stated that it will not fold its arms and allow its sugar industry to be driven to the ground by cheaper sugar imports from neighbouring countries. Some SADC countries have embarked on dam projects and the rehabilitation of old sugar mills with the active support of their respective governments. Examples in this connection are Mozambique and Swaziland.

The third consideration is that all the sugar industries in SADC play crucial strategic roles in their respective economies. For instance, they promote economic growth through contributions to national output, foreign exchange earnings and government revenues out of which social services are provided. They promote economic diversification through forward and backward linkages with other sectors (such as machinery, fertilizer, transportation, beverages, sweets, pre-packing, wholesale and retail). They promote human development through incomes generated from both direct and indirect employment (including the informal sector which can be quite vibrant); provision of social services (such as education, health, housing, water and recreation); participation of smallholder growers; and outsourcing of certain services (like rations, painting, maintenance and garbage collection).

It can be appreciated from all the above considerations that sugar is indeed a special commodity which requires special trading rules. In the long run, the best scenario is one where the distortions have been removed and trade is based on comparative advantage. This would be a first-best world. But before this happens, we are in a second-best world and require special rules to govern the trade of the sensitive product called sugar. It is the theoretical underpinnings of these rules which will be presented in this section of the paper. The approach will be general equilibrium in the sense of incorporating interactions among different sectors.

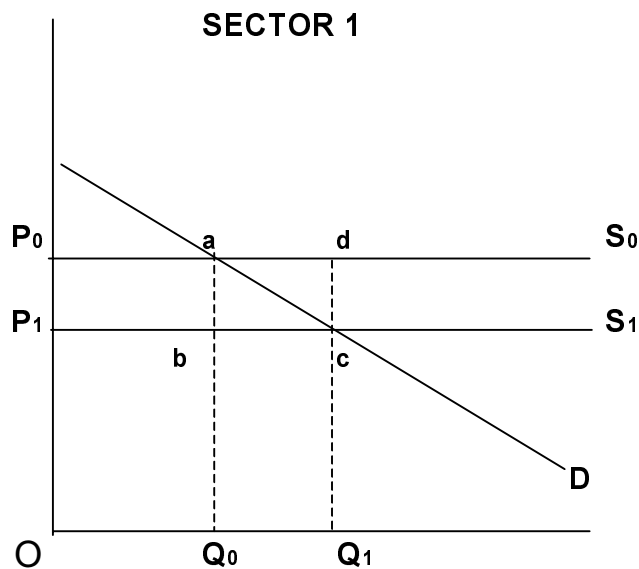
Suppose that the economy can be sub-divided into three sectors. Sectors 1 and 2 are producing closely substitutable commodities. Sector 2 has a distortion revealing itself in price being below the marginal cost of production (i.e., there is a production subsidy). Sector 1 is the controlled sector where a decision is to be made on pricing. Should the price be set above or below marginal cost of production? If price is not equated to marginal cost, then a distortion shall have been introduced into the controlled sector. Sector 3 produces a composite commodity where price equals marginal cost (i.e., there is no distortion).

To answer the question of where the price should be set in Sector 1, we make use of three diagrams corresponding to the three sectors. In each diagram, on the vertical axis is measured money value whereas on the horizontal axis is measured output. For analytical convenience, it has been assumed that the supply schedules are infinitely elastic in all sectors.

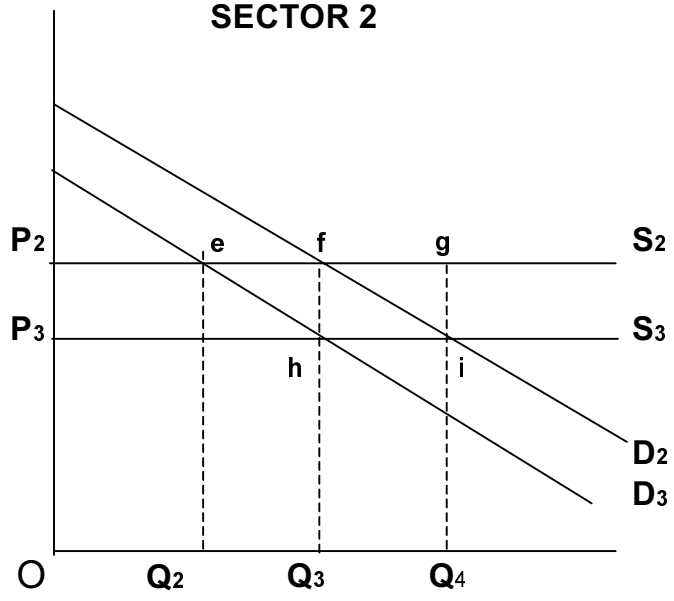
Suppose that the distortion in Sector 2 is in the form of a subsidy equal to  $P_2P_3$  per unit. The supply schedule without the subsidy is  $S_2$  whereas the supply schedule with the

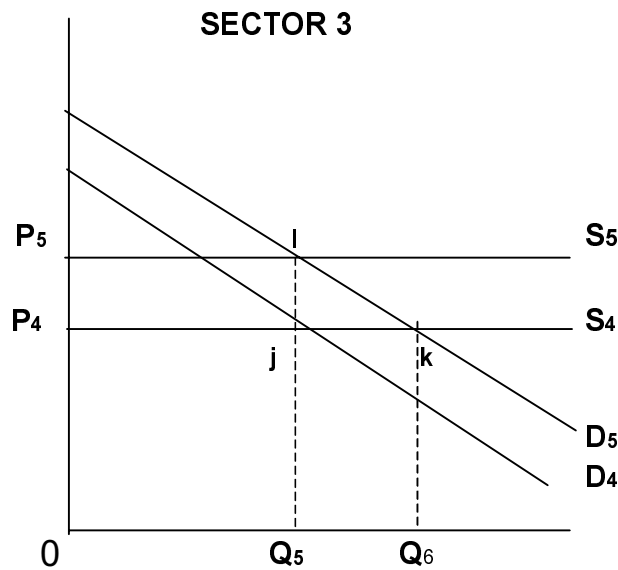
subsidy is  $S_3$ . Given the initial demand of  $D_2$ , the producer in Sector 2 will settle at point  $i$  where the output is  $Q_4$ . The socially optimal level of output is  $Q_3$  (corresponding to the intersection of  $D_2$  and  $S_2$ ). There are too many resources devoted to Sector 2 than are socially optimal. The result is a net social loss equal to  $fig$ . It is the difference between the resource cost of  $fQ_3Q_4g$  and consumer surplus of  $fQ_3Q_4i$ . This is the welfare loss that needs to be eliminated.

In Sector 1, let the initial supply schedule be  $S_0$  and the demand schedule be  $D$ . The intersection of these two schedules occurs at  $a$ ; giving rise to output level  $Q_0$ . The question then is at what level should price be set in the controlled sector. Should it be equal to  $P_0$  or not? To answer this question, let us observe what would happen if price were lowered below  $P_0$ . Specifically, let the price fall to  $P_1$  through a subsidy equal to  $P_0P_1$  per unit of output. The new intersection point at  $c$  gives rise to an additional resource cost of  $aQ_0Q_1d$  and additional consumer surplus of  $aQ_0Q_1c$ . Thus, there is an additional resource cost of  $acd$ .



### SECTOR 2





In the meantime, the fall in the Sector 1 price has brought about an inward shift of the demand curve in Sector 2 from  $D_2$  to  $D_3$ . This occurs because the products of these two sectors are assumed to be substitutes. The demand schedule must shift inwards until the point of intersection with  $S_3$  is directly below  $f$ . This is on account of the fact that the socially optimal level of output is  $Q_3$ . The resource saving associated with the contraction of output is  $fQ_3Q_4g$  and the consumer surplus loss is  $fQ_3Q_4i$ . Thus, there is a net saving equal to  $fig$ . This is the very amount that was a social welfare loss initially and needed to be eliminated. Hence the mission has been accomplished.

At the new intersection point of  $h$ , there is a net loss equal to  $ehf$ . This is on account of the fact that from a social viewpoint, the resource cost is  $eQ_2Q_3f$  whereas the consumer surplus is  $eQ_2Q_3h$ . Social welfare will be maximized if this loss as well that in Sector 1 (namely  $acd$ ) are eliminated. This will be done via fiscal transfers from Sector 3. Assuming that the products of Sectors 1 and 3 are complements, then  $D_4$  will shift outward to  $D_5$  (in the wake of the fall in the price of the Sector 1 product). The complementarity assumption is reasonable on account of the positive linkages between the sugar industry and various other sectors. The new intersection occurs at  $k$ .

Let the subsidy for Sector 1 be financed by a tax levied on Sector 3. This will bring about a shift of the supply schedule from  $S_4$  to  $S_5$ . The intersection point  $l$  has been deliberately chosen to be directly above  $j$  so that there is no permanent net movement of resources into Sector 3. The output level corresponding to intersection point  $l$  is  $Q_5$ . The movement from  $k$  to  $l$  has resulted in a loss of consumer surplus equal to  $ljk$ . For net social welfare to be maximized, the revenue of  $P_5P_4jl$  must be equal to  $ljk$  in Sector 3 plus  $ehf$  in Sector 2 plus  $acd$  in Sector 1.

There are two general conclusions emanating from the above diagrammatic analysis. First, price should not be set equal to marginal cost in Sector 1 if there is a distortion in Sector 2. In other words, a distortion should be deliberately introduced into Sector 1 for purposes of counteracting an existing distortion in Sector 2. Second, social welfare will be maximized if the sum of the consequential welfare losses is set equal to the fiscal transfers from Sector 3.

Let us now extend the first conclusion into the sugar world. We shall do so at two levels – namely, regional (one country versus other countries in SADC) and global (SADC region versus other economic blocs). At the regional level, the sugar industries in the different countries are subject to various forms of distortion. In the context of the second-best framework presented above, a given SADC country would be advised against opening up its borders to allow free trade in sugar. Net social welfare within SADC can only be maximized if there are special rules introduced to govern sugar trade.

At the global level, SADC has to decide whether or not to open up its borders collectively to other regions of the world. To the extent that these other regions are subject to various forms of distortions themselves, SADC would be advised against opening up its borders freely. It is not surprising in this connection that other economic blocs around the world exclude sugar from the normal free flow of trade. This is the case under the North American Free Trade Area (where sugar flows are governed by a side letter), European Union (where there is a sugar regime forming part of the common agricultural policy), Andean Pact and Mercosur.

The case for liberalized global trade is based on higher global income associated with comparative advantage. At some future point in time, sugar trade would also have to be liberalized. However, the liberalization should be a gradual process rather than an abrupt event that takes place overnight. The economies concerned should be allowed adequate time to adjust in an orderly fashion to the new dispensation. This is particularly important in the light of the fact that sugar is a political commodity which has historically featured prominently in national policy-making in both developing and developed countries.

The second conclusion from the diagrammatic analysis above can be generalized into the need for support of the sugar industry through fiscal transfers from the rest of the economy. This can come in different forms – such as improved infrastructure, subsidized credit for smallholder growers and tax credits for rebates given by the sugar industry to enterprises that add value to sugar locally. Whilst this is seemingly against the drive by the World Trade Organization (WTO) to, among other reforms, reduce domestic support measures, it can be accommodated under the special and differential treatment allowed for developing countries. SADC is indeed a developing region.

In conclusion then, we can say that because of the existing distortions facing the different sugar industries in both SADC and further afield, there is a case for special sugar trading rules. This case is built on the second-best theory. Until distortions in the rest of the sugar world are eliminated (or at least substantially reduced), it would not be in the long-

term interests of the SADC sugar industries to engage in free sugar trade. If there were to be free sugar trade in the currently distorted world, a few countries may benefit in the short run. But in the long run, overall social welfare in SADC would be lower than would be the case otherwise. Finally, there is a case for the support of the sugar industries through fiscal measures.

### III. SUGAR INDUSTRIES IN SADC

In this section we describe the SADC sugar industries using selected indices (some quantitative, others qualitative) and also highlight the kind of distortions which they face. We start with the following table showing production, consumption and trade:

**TABLE 1: Sugar Production, Consumption and Trade for SADC Countries (Raw Value; 1998)**

COUNTRY	PRODUCTION (Tons)	CONSUMPTION (Tons)	EXPORTS (Tons)	IMPORTS (Tons)
Angola	32 000	85 000	0	7 025
Malawi	209 703	158 161	67 224	16 469
Mauritius	666 841	42 683	638 694	41 434
Mozambique	38 555	121 125	20 286	98 307
South Africa	2 984 892	1 366 806	1 087 088	0
Swaziland	537 096	27 550	256 527	0
Tanzania	110 200	200 000	22 121	128 807
Zambia	172 600	74 800	86 800	2 564
Zimbabwe	571 943	305 325	242 641	11
TOTAL	5 323 830	2 603 400	2 421 381	294 617

**SOURCES:** Sugar Yearbook 1999 published by the International Sugar Organization, London and Swaziland Sugar Association for consumption in Swaziland.

Three are three observations to be highlighted from the above table. First, from an aggregate viewpoint, SADC is a net surplus producer (i.e., production exceeds consumption). Second, SADC is a net sugar exporter (i.e., exports exceed imports). Third, South Africa is the largest producer and exporter; followed by Mauritius; then Zimbabwe and Swaziland. The rest of the countries produce less than 210 000 tons per annum.

The following table ranks selected countries from SADC and rest of the world by unit production costs:

**TABLE 2: Raw Sugar Production Cost, Exports and Export Ratio for Selected Countries**

RANK	COUNTRY	COST PER TON (1987-92) (US \$)	EXPORTS (1998) (Tons)	EXPORT RATIO (1998) (%)
1	Guatemala	234	1 371 186	81,5
2	Zimbabwe	235	242 641	42,4
3	Swaziland	250	256 527	47,8
4	Thailand	251	2 443 777	59,0
5	Colombia	256	773 778	36,4
6	Brazil	258	8 675 148	45,3
7	Fiji	271	243 282	87,6
8	Australia	273	4 691 495	92,3
9	South Africa	294	1 087 088	36,4
10	India	303	85 774	0,6
11	Mauritius	314	638 694	95,8
12	Philippines	320	188 119	12,2
13	Cuba	338	2 568 580	78,0
14	El Salvador	348	255 345	52,5
15	Dominican Republic	349	260 082	50,4
16	Argentina	371	227 683	13,0
17	China	385	459 138	5,2
18	Turkey	485	303 507	10,9
19	Poland	563	369 409	16,9
20	European Union	570	6 357 196	35,4

**NOTE:** Export ratio is defined as exports divided by production (and then converted into percentages).

**SOURCES:** LMC International (for cost per ton) and Sugar Yearbook 1998 published by the International Sugar Organization, London (for exports and production).

The above table lists a sample of only 20 countries out of a total of 121 sugar-producing countries in the world. There are two observations to highlight from this table. First, the four SADC countries included in the sample are in the top 55% in terms of ranking by cost. They are in the top 45% if Mauritius is excluded because of its island status. This suggests that SADC is relatively cost-efficient in sugar production vis-à-vis the rest of the world. Bringing this observation together with that of SADC being a net exporter (Table 1), suggests that there can be significant mutual benefits derived from cooperation when it comes to accessing foreign markets. Such cooperation can take on various forms – such as using common port facilities, arranging co-shipments, sharing market intelligence, and having a common approach towards international developments.

The second observation is that there is no clear relationship between production costs and export levels. In terms of neoclassical economic theory, low production costs would be associated with high export levels. But this is not readily evident from the above table. There is actually a contradiction in the case of the European Union (EU) which has the highest unit cost but at the same time has the second highest level of exports (virtually all of which goes to the world market). There is also a contradiction where the EU has virtually the same export ratio as South Africa whose unit cost is almost half that of the EU.

The following model was specified to conduct a quick non-rigorous test of the hypothesis that production costs influence sugar trade:

$$Y = a + bX + E$$

Where Y = Sugar trade;  
 X = Cost per ton of sugar;  
 E = Error term (assumed to be normally distributed with zero mean and constant variance); and  
 a,b = Coefficients to be estimated.

The coefficient b is expected to be positive in terms of the hypothesis posited above. X is measured by cost per ton as reflected in Table 2. Y has three alternative measures – namely, export ratio (as defined in Table 2), volume of exports (as reflected in Table 2) and export share (defined to be the exports by a given country shown in Table 2 divided by the total of exports shown in that table). The results from ordinary least squares regression are summarized in Table 3.

**TABLE 3: Regression Results for Y = a + bX**

ALTERNATIVE MEASURE OF Y	ESTIMATE FOR a	ESTIMATE FOR b	R-SQUARED
Export Ratio	91,9127 (27,0253)	-0,1388 (0,0587)	0,2366
Export Volume	1 384 002 (2 420 930)	564,187 (5 262,756)	0,0006
Export Share	4,3939 (7,6859)	0,0018 (0,0167)	0,0006

**NOTE:** Figures in parentheses are standard errors.

Two observations can be highlighted from the above results. First, two of the estimates for b are in accordance with the hypothesis (i.e., they pass the economic test). However, in both cases the estimates are statistically insignificant at the 5% level (as reflected in

the high standard errors). Second, in the two cases which pass the economic test, the R-squared is virtually zero – signifying that X explains virtually nothing of the variation in Y. It can be concluded from these two observations that in the sample of countries shown in Table 2, sugar trade is not driven by sugar production costs. By extension, it can be concluded that other considerations (including market distortions) account for sugar trade.

In the case of SADC, some of the distortions are within individual countries and others are in the countries with which SADC would like to trade because of its comparative advantage in sugar production (especially the European Union and United States). Examples of distortions within SADC itself are quantitative import restrictions, high tariff walls, export licensing, subsidies and administrative changes in foreign exchange rates. Outside SADC, notable distortions are quantitative restrictions on sugar imports and various sugar price support measures. The latter types of distortions have a beneficial effect not only on the sugar industries in the developed countries where they obtain, but also on some of the SADC countries (under the ACP-EU Sugar Protocol and US tariff rate quota). Such distortions cannot be removed overnight.

The price structure faced by different SADC sugar industries to different degrees of impact are summarized in Table 4.

**TABLE 4: Prices Obtaining in Different Sugar Markets, July 2000**

MARKET	PRICE PER TON (US \$)	INDEX (World=100)
EU - Sugar Protocol	497,46	282,0
EU – Special Preferential Sugar	420,50	238,4
US – Tariff Rate Quota	363,76	206,2
World	176,38	100,0

**NOTE:** EU = European Union and US = United States.

**SOURCE:** Swaziland Sugar Association.

As can be appreciated, the highest price is obtainable from the EU under the ACP (African Caribbean Pacific)-EU Sugar Protocol (SP). It is about three times the world market price. It is followed by the price obtainable from the Special Preferential Sugar (SPS) Agreement under the ACP-EU arrangements, which is about two-and-half times the world market price. Next in line is the price obtainable in the US from the tariff rate quota (TRQ) operated under the Generalized System of Preferences. This is about two times the world market price. Then comes the domestic price which lies somewhere between the US and world market prices. The price pattern in Table 4 will change in line with changes in the EU domestic price, US domestic price, world market price and exchange rates.

The lowest price is obtainable from the world market. The latter is a residual market where sugar that cannot go into higher-paying markets is dumped. The price in this dumped market is typically below production costs. The higher the proportion of production sold in this market, the lower will be the average price per ton; other things being equal. Clearly, as the composition of export markets shifts towards the world market, the average price computed from all markets will fall, other things being equal.

The discussion in this section can be summarized in terms of four statements. First, SADC is a net surplus sugar producer as well as net sugar exporter. Second, the SADC sugar industries are of various sizes – with South Africa being very large; followed by Mauritius, Zimbabwe and Swaziland which are medium; and then the rest of the countries which are small. Third, on the basis of unit production costs, the SADC sugar industries are in the top 55% bracket in the world. Whilst the currently existing distortions largely disable production costs in driving sugar trade, the relatively lower SADC costs present an opportunity that can be exploited in future when the world sugar scene changes. Fourth, all the SADC sugar industries play strategic multifunctional roles in their respective economies. Moreover, sugar is a political commodity. It features prominently in national policies. Accordingly, free trade, which would cripple even the cost-efficient, is not a realistic option. Hence the need for an agreement to regulate sugar trade within SADC.

#### **IV. COMPONENTS OF THE SADC SUGAR COOPERATION AGREEMENT**

The basic objective of the current SADC Sugar Cooperation Agreement is to enable an orderly growth of the sugar industries in the light of their strategic importance to their respective economies as well as the currently existing distortions surrounding various sugar markets around the world. It has two main components - namely, market access and areas of cooperation. These will be discussed in turn; starting with the former.

Market access can be reciprocal or non-reciprocal. In the former case, each of the SADC countries would open up their respective markets to each other on some agreed basis. In the latter case, one or some countries would allow market access without requiring reciprocal arrangements with other SADC countries. Currently, most of the sugar from the rest of SADC which does not go into preferential markets tends to flow into the Southern African Customs Union (SACU). There are three considerations which account for this tendency. First, the SACU prices are higher than the domestic prices in the rest of SADC. Second, SACU has a very large market provided by South Africa as the biggest and most advanced economy. Third, all the adjacent SADC sugar producers with an exportable surplus have relatively lower production costs and can, therefore, readily access the SACU market.

Very little sugar has flowed from SACU into the rest of SADC. The South African sugar going into Mauritius is basically world market sugar. It may fetch a higher than world-market price as a result of a premium due to lower transportation costs as compared to

other world-market sugar suppliers. The point is that this sugar is not going there under special preferential arrangements.

Given the above scenario, the main question to deal with then is how to ensure that sugar flows into SACU from the rest of SADC do not create instability where net social welfare ends up being lower than would have been the case otherwise. In a second-best world, a justifiable principle on which to base market access is relative exposure to the world market. Generally speaking, the higher the exposure to the world market, the higher should be the access into the SACU market. This is an equitable principle to the extent that it recognizes the pain of exporting to the world market where prices are not only considerably lower than prices obtainable from preferential markets, but are typically below production costs. It is also efficient to the extent that it encourages a better allocation of resources within SADC, given the multifunctional role played by the SADC sugar industries in their respective economies as well as the lower overall SADC costs vis-à-vis the rest of the world.

Exposure to the world market can be proxied by surplus production which is, in turn, defined to be excess of production over consumption and exports to preferential markets. The following table presents the relative exposures of SADC countries into the world market:

**TABLE 5: Exposure of SADC Countries to the World Market, 1998**

COUNTRY	EXPORTS TO PREFERENTIAL MARKETS (Tons)	SURPLUS PRODU- CTION (Tons)	RELATIVE EXPOSURE (%)
Angola	0	0	0
Malawi	50 000	0	0
Mauritius	632 738	0	0
Mozambique	19 821	0	0
South Africa	40 244	1 577 842	76,8
Swaziland	186 000	323 546	15,8
Tanzania	12 000	0	0
Zambia	12 828	94 507	4,6
Zimbabwe	193 000	58 000	2,8
TOTAL	1 146 631	2 053 895	100,0

**SOURCES:** Table 1 and Sugar Yearbook 1998 published by the International Sugar Organization, London.

There are two portions of the SACU market which, in terms of the current Agreement, are to be shared on the basis of exposure to the world market. One is growth in the SACU market size (deemed to be 3% per annum for the next three years) and the other is a quantity of 20 000 tons which has been set aside to be shared by the non-SACU SADC

countries. The formula yielding the figures in the last column of Table 5 is dynamic in the sense of accommodating the changing circumstances of individual countries. This was done in recognition of the fact that being an agricultural product, sugar is subject to the vagaries of nature. In particular, weather conditions may change drastically from one year to the next resulting in large production swings. Furthermore, some preferential markets may disappear over time.

We now turn to the second component of the proposed protocol – namely, areas of cooperation. The areas of cooperation are meant not only to complement the market access component, but also to promote interaction among SADC sugar industries in the spirit of economic integration. Examples of these areas are sharing of training institutions, research facilities, sea-side export terminals, information on intra-SADC sugar flows, experiences pertaining to smallholder growers, transport to markets outside SADC and common approaches to international developments. The details on how cooperation would work in these areas are yet to be elaborated by the SADC Technical Committee on Sugar established in terms of the SADC Sugar Cooperation Agreement.

In summary then, we could say that the SADC Sugar Cooperation Agreement has been designed in the context of the second-best world in which sugar industries find themselves. It takes into explicit recognition the strategic and multifunctional roles played by SADC sugar industries in their respective economies. It would be myopic to engage in destructive competitiveness notwithstanding glaring trade imbalances among the different SADC countries. Other avenues should be found to redress the trade imbalances. The Agreement has two main components – namely, market access and areas of cooperation. Whilst initially the market access could be offered by SACU on a non-reciprocal basis, eventually it must be reciprocal in nature. It would be based predominantly on exposure to the world market. The areas of cooperation would not only complement market access, but would also promote regional interaction for mutual benefit.

## **V. CONSOLIDATED LIST OF KEY ISSUES**

The previous sections have alluded, both directly and indirectly, to various key issues facing the SADC sugar industries. This section brings them together for purposes of focusing ideas. The issues revolve around the central theme of long-term survival for the SADC sugar industries in the light of their comparative cost advantages on the one hand and distorted global sugar markets on the other hand. Some of the issues are largely under the control of national industries and/or governments whilst others can be best handled through cooperation at the regional level.

Issues emerging from the distortions of sugar markets which can be handled at the national level are as follows:

- ***Efficiency of Operations:*** Efforts should be continuously exerted to improve operational efficiencies at both field and factory levels. This entails ongoing training and upgrading of labour skills and installation of better equipment.
- ***Environmental Awareness:*** This derives its importance from the need to internalize all externalities so that the financial viability of the sugar industry truly reflects net social returns. It is only under such conditions that the allocation of resources can be said to be efficient and that the inter-generational distribution of net social benefits is equitable. Moreover, the demonstration of environmental friendliness of a sugar industry becomes a marketing tool. In the case of existing projects, there is need to undertake environmental audits to check whether all externalities are adequately accounted for. In the case of new projects, environmental impact studies must be conducted routinely and effectively.
- ***Value Addition:*** Raw sugar is a primary commodity. If exported as is, there is a loss of potential domestic income and employment. This potential loss can be minimized via more value-added activities that use sugar as one of the major inputs. Furthermore, value-added products have relatively high income-elasticities of demand. This means that as a country moves into a higher stage of development (reflected in higher per capita income, other things being equal), there will be an increase in the domestic demand for the value added products. Thus, there will be a self-reinforcing effect resulting in a spiral of higher sugar production and higher value addition on the sugar.
- ***Domestic Support Measures:*** It was demonstrated in Section II that in a distorted world there is a case for fiscal transfers from the rest of the economy to the “controlled sector”. This provides the rationale for the support of the sugar industry by national governments. This support can come in various forms – such as improvement of economic infrastructure (roads, bridges, etc); giving tax credits to the sugar industry for the provision of social services (education, health care, housing, water and recreation) which would normally fall under the purview of the public sector; tax credits to the sugar industry for rebates extended to value-adding customers; and provision of subsidized credit to smallholder growers. Whilst domestic support measures in general are against the spirit of the multilateral trading system, they are permissible under WTO rules in the context of special and differential treatment for developing countries.
- ***Private Enterprise System:*** The SADC sugar industries have prospered largely because of their private enterprise nature. Under such conditions, there is a higher and faster response rate to price signals as well as to incentives or disincentives. Government should restrict itself to the active provision of an enabling environment for the private sector to generate jobs and incomes efficiently.

Issues emerging from the distortions of sugar markets which can be handled at the SADC or regional level are as follows:

- ***Market Access Within SADC:*** In terms of the current SADC Sugar Cooperation Agreement, market access is non-reciprocal. Non-SACU SADC countries can sell specified quantities of sugar into SACU without similar access being granted to SACU countries into the rest of SADC. This should be considered as a

medium-term arrangement with the long-term objective being reciprocal access. That will not only improve the regional allocation of resources, but will also improve the regional distribution of benefits in as far as the sugar sector is concerned.

- ***Access into Foreign Markets:*** Because SADC as a whole is a net producer and net exporter of sugar, there is a potential for cooperation in accessing foreign world markets. This is especially the case where individual countries may not have large enough quantities of sugar to enjoy economies of scale in transporting and storing the sugar at the right places and at the right time. Cooperation at the regional level can enable the exploitation of such economies.
- ***EU Sugar Regime:*** Due to GATT (General Agreement on Trade and Tariffs) commitments and continuous pressures under the multilateral trading system, there are reforms expected to take place in the EU Sugar Regime. Some of these reforms will result in a reduction of domestic EU sugar prices, reduction of import quotas from the ACP countries and reduction of export subsidies (resulting in the reduction of EU exports to the world market). These effects will have differential impacts on the SADC surplus sugar producers. Those SADC countries currently benefiting from the protected EU markets (under the ACP-EU Sugar Protocol and ACP-EU Special Preferential Sugar Agreement) will be adversely affected by the reduction in the EU domestic sugar prices and import quotas. This adverse impact will be offset to some extent by an increase in the world market price expected from a reduction of EU exports. But the latter benefit may not materialize if low-cost sugar producers such as Brazil and Australia increase their world market exports. There is a need to study these possible effects using a general-equilibrium type of model. There needs to be agreement at the SADC level on how to approach the issue of the reduction of preferential market access. This is especially important in the context of the negotiations that are expected to take place in a few years time on the EU-SADC trade arrangements to take place after year 2008 when the current ACP-EU Benin Convention comes to an end.
- ***US Sugar Policy:*** Like in the case of the EU Sugar Regime, the US Sugar Policy is under pressure for reform. If the reform comes in the form of a reduction in the domestic price of sugar without a concomitant increase in the world market sugar price, then the SADC countries enjoying tariff-free access under the generalized system of preferences will be adversely affected. The degree of effect will depend on the sugar quantities involved. There is a need to study these possible effects using a general-equilibrium type of model.
- ***WTO Negotiations:*** Negotiations on the further reform of trade in agriculture (under which sugar falls) have been mandated to proceed as from January 2000 under Article 20 of the Uruguay Round Agreement on Agriculture. These negotiations will be taking place in special sessions of the WTO Agriculture Committee. These special sessions will, in turn, be held back-to-back with the normal scheduled meetings of the Agriculture Committee. The problem with most of the SADC countries is that, with the exception of South Africa and Mauritius, they individually possess inadequate manpower and financial resources to participate meaningfully in these negotiations. Yet if they were to pool their resources, then they can have an impact. The potential for this cooperation was

- demonstrated in Seattle, USA, when the SADC countries followed the otherwise disorganized sessions through regular meetings among themselves to brief each other and agree on the next move. The SADC countries will not always see eye-to-eye on all issues being discussed. Where this is the case, a long-term view may yield some points of agreement and cooperation. For instance, if the ultimate objective is the same, there may be an agreement not to oppose each other on differing short-term tactics to be pursued by the different countries. Furthermore, there may be agreement on the kind of tradeoffs to be pursued by different countries. The point is that discussion at the SADC level has the potential of producing higher benefits for the region than non-cooperation.
- **WTO Waivers:** The ACP-EU arrangements signed in Benin, Cotonou in June 2000 have been notified to the WTO. By their very nature, these arrangements are discriminatory against third parties and, therefore, are against the spirit of the multilateral trading system. However, they are justified as a means of incorporating the ACP developing countries into the globalization process. They are also consistent with the principle of special and differential treatment in the case of developing countries. Even though South Africa is not a signatory to these arrangements, it is expected to support the waiver application for at least four reasons. First, most of the SADC countries are involved. If they prosper as a result of the arrangements, there will be beneficial trickle-effects to South Africa. Second, the other SADC countries did not oppose the EU-SA Free Trade Area arrangements. Third, the period after year 2008 may see a new EU-SADC dispensation built on the current ACP arrangements. Fourth, the SADC Trade Protocol (to which the Sugar Cooperation Agreement has been annexed) will be notified to the WTO. It is useful to always present a unified front when dealing with waiver applications involving some or all SADC countries.
  - **EU-SA Free Trade Area Agreement:** This agreement has implications for South Africa's neighbours. This is the case within SACU because once EU products come into South Africa, they can move freely into the other markets. It will also be the case for those products which will move relatively freely under the SADC Trade Protocol. Of immediate concern to the sugar industry is the importation of EU products enjoying export refunds. Under this system, the EU manufacturer essentially buys the sugar at world prices. Given the fact that prices within SADC are higher than the world market prices, a manufacturer of a similar product based in SADC would be placed at a cost disadvantage. This adverse effect can be dealt with at the SADC or SACU levels. Solutions can be in the form of compensation (fiscal transfers, technical assistance, restructuring of industries, re-training of labour, etc) or basing the export refund system on the average SACU/SADC sugar price rather than the world market price.
  - **General Cooperation at International Forums:** Because of shortage of national resources, it becomes important to pool them for effective participation in the international arena. Two international forums (not mentioned above) where SADC can derive mutual benefit for the individual countries are the International Sugar Organization and World Sugar Research Organization.

## VI. CONCLUSION

The objective of this paper was to highlight the major issues facing SADC in the context of internal and external distortions. We now wish to summarize the major issues emerging from the analysis conducted in this paper.

First, because of the existing distortions facing the different sugar industries within SADC and further afield as well as the strategic multifunctional role played by the sugar industries in their respective economies, there is a strong case for special sugar trading arrangements. These are encapsulated in the SADC Sugar Cooperation Agreement which has been annexed to the SADC trade Protocol. Until distortions in the major sugar markets around the world are removed (or at least substantially reduced), it would not be in the long-term interests of the SADC sugar industries to engage in free sugar trade.

Second, SADC is a net surplus sugar producer and net sugar exporter. Coupled with the fact that the SADC sugar industries are relatively cost-efficient, this means that there can be mutual benefits generated from cooperation in accessing foreign markets. The exact nature of the cooperation can be a subject of discussion among the sugar producing countries themselves.

Third, the SADC Sugar Cooperation Agreement has two main components – namely, market access and areas of cooperation. The access of each other's markets in SADC is governed by special rules (given that free sugar trade is currently not a viable option). A fundamental principle underlying such rules should be exposure to the world market. This is both equitable and efficient. The areas of cooperation are meant not only to complement market access, but also to strengthen the spirit of togetherness in SADC.

Fourth, issues which can be handled at the national level include efficiency of operations, environmental awareness, value addition, domestic support measures and private enterprise system. Issues which can be handled at the SADC/regional level include market access within SADC, access into foreign markets, EU sugar regime, US sugar policy, WTO negotiations on agriculture, EU-SA free trade area and general cooperation at international forums.