



An Analysis and Review of Subsidies in Southern Africa

The Case of the Southern African Customs Union
(SACU)

Rashad Cassim and Donald Onyango
Southern Africa Trade Researchers Network (SATRN)

JULY 2003

iisd International Institute for Sustainable Development
Institut international du développement durable

The International Institute for Sustainable Development contributes to sustainable development by advancing policy recommendations on international trade and investment, economic policy, climate change, measurement and indicators, and natural resources management. By using Internet communications, we report on international negotiations and broker knowledge gained through collaborative projects with global partners, resulting in more rigorous research, capacity building in developing countries and better dialogue between North and South.

IISD's vision is better living for all—sustainably; its mission is to champion innovation, enabling societies to live sustainably. IISD receives operating grant support from the Government of Canada, provided through the Canadian International Development Agency (CIDA) and Environment Canada, and from the Province of Manitoba. The Institute receives project funding from the Government of Canada, the Province of Manitoba, other national governments, United Nations agencies, foundations and the private sector. IISD is registered as a charitable organization in Canada and has 501(c)(3) status in the United States.

Copyright © 2003 International Institute for Sustainable Development

Published by the International Institute for Sustainable Development

All rights reserved

International Institute for Sustainable Development
161 Portage Avenue East, 6th Floor
Winnipeg, Manitoba, Canada
R3B 0Y4
Tel: +1 (204) 958-7700
Fax: +1 (204) 958-7710
E-mail: info@iisd.ca
Web site: <http://www.iisd.org/>

TABLE OF CONTENTS

Executive Summary	1
1 Main Sectors Affected By Subsidies	5
1.1 Background of the Sectors	6
2 Domestic Subsidies and Incentives.....	7
2.1 Measures Directly Affecting Exports	7
2.1.1 <i>Duty-Free Incentive Scheme (Item 470.03 Of The Customs And Excise Act)</i>	7
2.1.2 <i>Export Marketing Assistance Programme (EMIA)</i>	7
2.1.3 <i>Refund of Rebates on Products Used in Export (521.00)</i>	8
2.1.4 <i>The Duty Credit Certification Scheme (DCCS)</i>	9
2.1.5 <i>The Motor Industry Development Program (MIDP)</i>	10
2.2 Measures Directly Affecting Production and Trade	14
2.2.1 <i>Industrial Development Zones</i>	14
2.2.2 <i>Spatial Development Initiatives</i>	14
2.2.3 <i>Small Medium Enterprise Development Program</i>	14
2.2.4 <i>Strategic Investment Projects (SIP) Program</i>	15
2.2.5 <i>Producer Support Estimates (PSE)</i>	17
2.3 Subsidies and the Environment – The Energy Sector.....	22
2.3.1 <i>Alternative Energy Sources</i>	29
2.3.2 <i>The Social Impact of Cleaner Technologies</i>	31
3 Foreign Subsidies	33
3.1 Agricultural Sector Subsidies.....	33
3.1.1 <i>The Common Agricultural Policy</i>	34
3.1.2 <i>Impact of the CAP on the Domestic Sugar Sub-Sector</i>	35
3.1.3 <i>Impact of the Cap on the Beef Sub-Sector</i>	35
3.1.4 <i>The 2002 U.S. Farm Bill</i>	37
3.2 OECD Steel Sector Subsidies	38
3.3 WTO Dispute Cases.....	39
4 The Reform of Domestic Subsidies.....	41
References.....	43
APPENDIX 1 World Reference Prices Used for Estimating Agricultural Producer Support Estimate (PSE)	45
APPENDIX 2 SACU Trade With Selected Regions	46
APPENDIX 3 SACU Incentive/Subsidy Schemes As At March 2003 (Alphabetically Arranged)	54

LIST OF TABLES

Table 1: SACU selected socio-economic indicators, 1997-2001	5
Table 2: Qualifying Criteria for the DCCS	9
Table 3: The MIDP as Amended in the Mid-Term Review	11
Table 4: Classification of South African agricultural budget expenditures according to the OECD categories (1996/97 – 1998/99) (Rand).....	20
Table 5: Total PSE per commodity (Rand)	21
Table 6: Electricity Generation and Consumption in South Africa, 1990-2000 (billion kWh).....	22
Table 7: Coal Production and Consumption in South Africa, 1990-2000 (in millions of short tons).....	23
Table 7A: Environmental Implications of Using One kW Hour of Electricity	24
Table 8: Other environmental aspects of Eskom’s activities.....	26
Table 9: Fossil Fuel-related Carbon Dioxide Emissions in South Africa, 1990-2000 (millions of metric tons of carbon).....	27
Table 10: Indicators of trade barriers facing developing countries in the EU, U.S., Canada and Japan	33
Table 11: The Basis of the EU-South Africa Beef Trade.....	36
Table 12: SACU Countervailing measures 1 July 1998 – 30 June 2002.....	40
Table A1: SACU Exports to the EU 1997-2002 (current R’000)	46
Table A2: SACU Exports to the U.S. 1997-2002 (current R’000).....	48
Table A3: SbACU Imports from the EU 1997-2001 (current R’000).....	50
Table A4: SACU Imports from the U.S. 1997-2002 (current R’000).....	52

Executive Summary

This paper aims to illustrate the extent to which subsidies, whether direct or indirect, are still commonplace within the economic sectors of the countries that together comprise the Southern African Customs Union (namely Botswana, Lesotho, Namibia, South Africa and Swaziland), and whether they flout the multilateral trade rules as embodied in the World Trade Organization (WTO).

Section 1 is an overview of the various countries that make up the SACU, and provides a snapshot of the structure of these countries' economies.

Section 2 is an in-depth analysis of the various domestic subsidies and incentives open to the various economic sectors in South Africa (where the bulk of these measures are to be found), although taking into account the existence and use of these measures in neighbouring countries, where applicable. The general finding is that most of these incentives and subsidies for the manufacturing sector comply with WTO rules, with the exception of the Duty Credit Certification Scheme, applicable to the clothing and textiles sectors, and which is due to be phased out by January 2005. These incentive and subsidy schemes are mitigated largely on economic grounds—to ensure competitiveness in the sectors where they are applicable, and also on social grounds—where the livelihood of the populace is dependent not just on the direct numbers of jobs in these sectors, but also indirectly through support industries. Section 2 also examines newly-introduced measures in place that directly influence production and trade, such as Industrial Development Zones (IDZs) and Spatial Development Initiatives (SDIs), and the likely impact they would have on the SACU economy.

The paper reports that since the late 1980s, the agricultural sector, particularly in South Africa, has undergone significant and radical reform, with all marketing boards being abolished and Quantitative Restrictions (QRs) being tariffied and further reduced. Most agricultural imports were regulated by QRs prior to 1992, after which the process of tariffication and subsequent scaling down of tariffs began. The process of deregulation of agricultural marketing in South Africa started before the Uruguay Round was implemented in 1995. The process of exposure of farmers to a deregulated environment in which government support in the form of Agricultural Control Boards was progressively eliminated went beyond South Africa's WTO commitments and arguably has had more far reaching consequences for South Africa's farmers than the Uruguay Round Agreement on Agriculture.

The Producer Support Estimate (PSE) for the agricultural sector has been declining since the mid-1980s, as the deregulation of the agricultural sector progressed, and by 1998, most commodities had practically no domestic support in the form of policy interference, with the exception of a few highly tariff-protected commodities, namely sugar (40 per cent), dairy (20 per cent), beef and veal (20 per cent), mutton (50 per cent) and wheat (20 per cent). In place of the previous sectoral control boards, a

commodities futures market now exists, which enables farmers to manage the risks inherent in the agricultural sector.

With regard to the energy sub-sector, South Africa is regarded as a comparatively energy- and carbon-intensive country in relation to other African countries as well as relative to many developed countries, with more than 85 per cent of coal production being used in electricity generation and other mineral beneficiation activities, as well as domestically as a source of energy. The manufacturing sector in turn is the largest consumer of electricity in the region, accounting for 44 per cent of total consumption, followed by mining and residential customers with 18 per cent of demand, and nine per cent for other commercial customers. Residential consumption presently accounts for the fastest growth, owing to South Africa's success with rural electrification—in addition, with more residential consumers being connected to the national grid, there has been a marked increase in peak-period demand, which has substantially changed the country's load profile.

The production, transformation and use of energy generate substantial environmental impacts in South Africa, with the coal fuel cycle being the dominant source of air pollution and overall waste generation in South Africa. Liquid fuels in the transport sector are the second major source of air pollution whereas in the rural areas the major pollution-related problem is indoor pollution resulting from the inefficient burning of low quality fuels, mainly wood and coal which adversely affect health and visibility. However, South Africa has to tread the balance between environmental concerns and economic expansion goals—carbon dioxide emissions are closely related to economic growth, industrialization and overall energy consumption.

The ability of developing countries, like South Africa, to respond to concerns about climate change are complicated by the fact that a greater majority of South Africans need to increase their living standards and this may depend on increased per capita energy use, which may in turn depend on increased reliance on fossil and other solid fuel-like woods which have high carbon dioxide emissions. It is instructive to note, however, that there exists little by way of subsidies or incentives that would encourage a shift towards cleaner technology and renewable forms of electricity generation due to the low coal price.

Section 3 examines the implications that subsidies in foreign countries have on the SACU economy. The primary subsidies in this regard are found in the agricultural and primary manufacturing sector (iron and steel). The bulk of SACU exports to the EU are agricultural and agro-processed products, which are affected by agricultural sector subsidies under the EU Common Agricultural Policy (CAP), whose ultimate aim is to ensure continuity in supply, guaranteed farm incomes and little or no variation in price—any produce exported means subsidies for farmers, ensuring that all farm produce was sold at a fixed price.

The first impact of the CAP on the domestic agricultural sector is manifest in the sugar industry of South Africa and Swaziland. For South Africa, sugar exports realized the highest proportion of all agricultural sector exports in 2002 (56 per cent of the total), while in Swaziland, cane production accounted for over 50 per cent of all farm output, 18 per cent of total national output and 11 per cent of national wage employment. Swaziland currently exports 92 per cent of all its sugar output, and enjoys preferential treatment in the EU, through the EU Sugar Protocol (where it has a quota to sell sugar at a price above the world equilibrium price) and the U.S. under a preferential tariff quota.

However, despite this preferential access to the EU market via the Sugar Protocol, Swaziland is increasingly becoming vulnerable to the possibility that when market access to the EU for sugar from all Least Developed Countries (LDCs) through the EU Everything-But-Arms Initiative becomes a reality, then its preferential quota might decline, with disastrous consequences for the economy. However, the more pressing concern for the Swazi economy revolves around the dumping of heavily subsidized sugar products into SACU. With cheaper sourcing options from the EU, South Africa's confectionary markets are depending less on Swaziland, and this has sounded the death knell for the sugar industry.

In the beef sector, where the key players are South Africa, Botswana and Namibia, the latter two countries enjoy preferential access to the EU via the Beef and Veal Protocol of the CAP, which in typical EU fashion has sustained beef prices well above world market prices, disconnected from market realities and driven by the system of export refunds. EU exports of beef to ACP countries, and Southern Africa in particular, largely consist of low quality beef targeted at the lower end of the market, and this provides direct competition with production by small-scale farmers and emergent commercial farmers, thereby impacting on income and market-oriented development of the sector. The consequences of this have been vividly noted in Namibia, whose rural inhabitants have largely suffered as their main market is saturated by heavily subsidized low grade beef from the EU, leading to a loss of livelihood on their part.

Despite the impending reforms in the EU beef sector, which entail a shift from price support to direct aid to farmers (and is estimated to reduce the EU intervention price for beef by 20 per cent between 2001-2003), the implications of this reduction will be a reduction in the price obtained by Southern Africa beef exporters under the beef protocol. While this is still substantially above the world market prices for beef, the returns on beef exports could be much lower by 2008, when the reform process comes to an end.

The U.S. equivalent of the CAP is the Farm Bill, which, while ostensibly tailored to increasing payments to agri-business concerns, is feared to not only encourage overproduction but also shut out developing countries from the U.S. and international markets, by increasing U.S. agriculture spending by close to 80 per cent to a total of some \$190 billion over the next 10 years. The 2002 Farm Bill guarantees U.S.

farmers more stable incomes by increasing price supports for grain and cotton producers, reviving subsidies for honey, mohair and wool, and adding new ones for milk, peanuts, lentils and chickpeas. The impact of the 2002 Farm Bill on the SACU agricultural sector remains to be seen, however, especially in light of the Free Trade Area Agreement being signed by the U.S. and SACU—preliminary indications so far suggest that one sector which is most at risk is poultry, which faces much the same fate as the beef sector from EU beef sector subsidies.

Other notable subsidies with the potential to have a harmful impact on SACU economies, particularly South Africa, are to be found in the steel sectors of OECD countries, where government intervention has spawned a massive surplus in steel making that needs to be offloaded at all costs, hence the emergence of anti-competitive trade practices such as subsidization of exports, dumping on international markets, import restrictions and the emergence of national and regional cartels, all of which exerted great influence on world markets. For those markets that remain relatively open, there has been a marked influx of cheap steel, especially for those countries that have no steel making capacity of their own.

South Africa (on behalf of SACU) does not have any dispute cases pending before the WTO, either as a complainant or defendant, although it is shown to have made prodigious use of anti-dumping and countervailing measures. By the end June 2002, there were 98 definitive anti-dumping duties in force, as compared to 35 at the end of June 1996, and the majority of these measures affected chemical products, metal products, glass and glassware, textiles and clothing.

In general, it can be argued that South Africa and other SACU member states have, since the beginning of the 1990s, made significant strides in eliminating both trade distorting subsidies. Most (if not all) existing incentives and subsidies are compliant with WTO rules and regulations—so-called supply-side measures that enhance productivity and competitiveness in the economy. The rationale for reforming subsidies has largely been economic, driven by efforts to make South Africa (and the other SACU members) compliant with the new trade regime as embodied in the WTO. Also of importance is the reduction of the national budget with the removal of these price-distorting subsidies. Therefore this frees resources for other important developmental and social needs, such as primary healthcare and social welfare.

With regard to energy, the greatest motivation for reforming the nature of subsidization in this sector revolves around environmental issues, with a shift to cleaner technologies being the greatest motivating factor. The omission of some costs from the pricing process of energy has had a distorting effect on the determination of input prices and national accounts, not to mention outweighing the environmental effect of energy subsidies. There is, however, an increasing realization that a shift towards cleaner production of energy will bode well for a healthier environment, not just for the region but the world as a whole.

1 Main Sectors Affected By Subsidies

This paper aims to outline the extent to which direct and indirect subsidies are still prevalent within South Africa's economic sectors, examining in some detail their impacts on prices of goods, services, the environment and overall economy. Focus is paid to the manufacturing, agriculture and energy sectors, where subsidies have played a significant role in determining output and performance in past decades. We end off examining whether the subsidies prevalent in South Africa are in contravention of the WTO rules.

While this paper provides a detailed analysis of the literature on subsidies and incentives in South Africa, it has, wherever possible, taken into account the extent of the same in the neighbouring countries of Botswana, Lesotho, Namibia and Swaziland, which together with South Africa comprise the Southern Africa Customs Union (SACU), through primary material released by the governments of SACU members, and consultation with ministry officials.

Table 1: SACU selected socio-economic indicators, 1997-2001

	1997	1998	1999	2000	2001
Area ('000 km)	2674.8	2674.8	2674.8	2674.8	2674.8
Population (million)	47.3	48.3	49.4	50.2	50.8
Urban (%)	47.4	47.7	47.9
Density (per cent per km)	17.7	18.1	18.5	18.8	19.0
Population growth rate (per cent per year)	2.4	2.2	2.2	1.7	1.1
Life expectancy	51.6	50.0	48.6
GDP (US\$ million)	159770.0	144082.3	141386.6	138583.5	124323.3
GDP per capita (US\$)	3377.8	2980.6	2862.7	2759.0	2447.3
Share of real GDP (per cent)					
Agriculture	4.8	4.5	4.6	4.7	4.5
Mining and quarrying	7.8	7.9	7.6	7.4	7.6
Manufacturing	20.0	19.5	19.0	19.1	19.1
Water, electricity and construction	6.8	6.8	6.7	6.8	6.8
Services	60.5	61.3	62.1	62.0	62.0
Exports of goods and non-factor services (US\$ million)	42344.1	39979.8	38655.0	42396.6	40800.1
Imports of goods and non-factor services (US\$ million)	41306.9	39221.7	36413.5	38848.2	36248.2
(Exports + imports) /GDP (per cent)	52.4	55.0	53.1	58.6	62.0

Source: WTO (2003)

One major finding of this paper, and which may be applicable to most of the countries in the region, is that explicit subsidies (cash transfers to the economy or market price support) are relatively low as compared to the European Union (EU) and the United States (U.S.), although broadening this definition to include high tariffs and significant tax holidays, suggests that the latter are more prevalent in the region as compared to other developing countries.

1.1 Background of the Sectors

Although, South Africa's economy is quite diversified, the same cannot be said of the other SACU members. In Botswana, diamonds and beef are the mainstay of the economy, while diamonds, meat and fish are central to the Namibian economy. Lesotho's economy revolves around clothing, textiles, water and migrant remittances, whereas Swaziland depends mainly on its sugar industry and agro-processing.

South Africa has traditionally dominated intra-SACU trade—estimated at three quarters of overall trade with Botswana, Lesotho, Namibia and Swaziland. In 1998/1999, the total trade surplus between South Africa and the other customs unions members exceeded R20 billion.

Outside SACU, the EU, especially the United Kingdom, continues to be the main export market for SACU countries, followed by the United States, especially since the introduction of the African Growth and Opportunity Act (AGOA) in April 2000 (See Appendix 3). Exports from SACU to the Southern African Development Community (SADC)¹ increased from R3 billion to R22 billion during 1990-00, a weighted annual average growth rate of 22 per cent. Amongst the leading export products of the SACU countries outside the common customs union are: diamonds, platinum group metals, meat, fish, textile, clothing, and sugar and related products (see Appendix 3). Outside SACU, imports largely originate from the EU, United States, and other African countries, consisting chiefly of machinery, metals, transport equipment (including vehicles), food and beverages, and supplies for the clothing industry.

¹ The Southern African Development Community is a regional Free Trade Area that comprises Angola, Botswana, the Democratic Republic of Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, the Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe.

2 Domestic Subsidies and Incentives

2.1 Measures Directly Affecting Exports

These incentives are generic to the manufacturing sector as a whole, and are therefore considered to be non-actionable subsidies. Some of the more widely used ones are discussed below.²

2.1.1 Duty-Free Incentive Scheme (Item 470.03 Of The Customs And Excise Act)

This scheme allows for the duty-free importation of goods that are used for manufacturing, processing, finishing, equipping or packing goods exclusively for export. As a general rule, a rebate is given sympathetic consideration if it is clear that the exports will fall if the rebate is not granted. If permanent provisions already exist for drawbacks of the duty on inputs for export goods, the Board in general gives sympathetic consideration to the recommendation of a rebate under Item 470.03, except when it appears that the interests of local manufacturers of inputs are detrimentally affected.

A rebate of duty under Item 470.03 is allowed in cases where the imported inputs concerned are not available from South African resources. As a general rule, the rebate is recommended if the available South African inputs are not of acceptable quality or type. In the case of problems relating to quality, available variety or range, temporary drawback permits are granted to allow possible South African suppliers the opportunity to improve the quality or range of their products.

2.1.2 Export Marketing Assistance Programme (EMIA)

The EMIA endeavours to provide partial compensation for exporters in respect of the costs of developing export markets for South African products and services, and to encourage foreign direct investment into South Africa. The primary objectives of the EMIA are to assist exporting firms with primary export market research and trade missions. EMIA consists of four parts, namely:

Primary Market Research: this provides partial compensation to small and medium sized exporting firms for costs incurred in the development of new export markets;

Outward Selling Trade Mission Scheme: this provides financial support to firms in order to make contact with foreign firms;

Inward Buying Trade Mission Scheme: this facilitates the travel to South Africa of inward buying trade missions, with the intention of facilitating contact with South African exporting firms; and

Exhibition Assistance Scheme: this encourages and assists South African exporting firms to travel abroad and participate in exhibitions.

² For a detailed listing of all subsidies and incentives currently in place for the SACU, please refer to the Appendix.
An Analysis and Review of Subsidies in Southern Africa
The Case of the Southern African Customs Union (SACU)

In order to determine eligibility under the EMIA, Trade and Investment South Africa (TISA), a specialized division of the Department of Trade and Industry, evaluates the production and export performance of the applicant, as well as the type of product to be exported. Also assessed is the potential available or existing export capacity available to the applicant, together with the level of labour absorption, location and technological requirements.

Access to EMIA assistance is further limited to the manufacturers of products, including small, medium and micro-enterprises (SMMEs), export trading houses, commission agents, export councils, industry associations and Joint Action Groups representing at least five South African entities.

2.1.3 Refund of Rebates on Products Used in Export (521.00)

This rebate is applicable to customs duty on products that are not available in the SACU for manufacturing purposes. The purpose of this offering is to create cost reduction of inputs, increase global competitiveness, and promote manufacturing activities in the SACU. Permanent provisions are introduced if the exporter enjoys established export markets, exportation takes place on a regular basis, or South African raw materials suitable for the specific use are not available.

These drawbacks are only introduced if the duty payable represents a significant burden, and exemption from the duty is necessary to improve the competitive position of the exported product. However, if the price consideration is the main reason why local material is unsuitable the Board does not necessarily recommend that a drawback be introduced.

Applications for permanent drawback provisions are published in the Government Gazette with the object of affording all interested parties the opportunity to comment. Upon the expiry of at least six weeks, the Board considers the applications. If the Board finds justification for supporting an application, a recommendation for the amendment of the Customs and Excise Act is submitted to the Minister by means of a formal report; if not, the applicant is notified directly of the Board's decision. The same procedure is followed when the Board receives an application for the withdrawal of a permanent drawback provision.

The exporter can, in terms of Item 521.00 (I), apply for a permit from the Board, to allow such drawback.

Usually the Board recommends the issuing of permits for drawback of customs duty:

- As temporary and possibly urgent assistance during the period required by the Board to complete an investigation in connection with the establishment of a permanent drawback provision; or
- If it is clear that exportation will take place only once, or a prospective exporter wishes to test the export market.

2.1.4 The Duty Credit Certification Scheme (DCCS)

The Duty Credit Certificate Scheme (DCCS), introduced in 1993 and applicable until 2005, is the primary instrument for restructuring the Clothing and Textile sectors, which in 2001 was responsible for 4.6 per cent of overall Manufacturing GDP, 3.4 per cent of total manufacturing exports by value and 14.8 per cent of the labour force.

The aim of the DCCS is to provide financial incentives specifically to clothing and textile exporting firms through import certificates, and is the primary instrument of restructuring within the clothing and textile sectors. Besides providing cheaper access to inputs and resources, the DCCS also aims to revitalize and kick-start the hitherto highly protected and labour-intensive sectors in the wake of trade liberalization and enhancing export competitiveness.

The program offers duty credit certificates to qualifying exporters, and can be used to access imported inputs. DCCS can be claimed for up to 35 per cent of the value of exports with the highest value for clothing and the lowest for yarn (eight per cent to 12 per cent). Other salient features of the DCCS are that they are only eligible for offsetting duties on importation of similar products to those exported, and one stage back, and in addition, only in respect of production for the domestic market.

For the purposes of the DCCS, the exporting entity or form must comply with two of the three following criteria:

Table 2: Qualifying Criteria for the DCCS

Size	Total Annual Turnover (excl VAT)	Total Asset Value (Excl Fixed Property)	Total number of full time employees
	Less than	Less than	Less than
Medium	R25million	R5million	51-200
Small	R5million	R1million	5-50
Micro	R1.25 million	R0.25million	1-4

Source: DTI

The performance of the scheme has been satisfactory to date with exports increasing in the second half of the decade. On the negative side of the scheme, it has been found that in the clothing and textile sectors, the number of firms is many and yet the number of firms that benefited from the scheme is only 100.³ The scheme also failed to access small and medium size firms, which was one of its principal targets.

The lack of detailed data on DCCS firms and their performance makes it difficult to assess the usefulness of the program. Therefore, commentary on DCCS is based on reason alone, not demonstrated performance. DCCS compensates for higher production costs in South Africa, and at least part of the

³ K. Reid (1999) 'A Critical Review of the DCC Scheme', Department of Trade and Industry Policy Support Programme working paper.

DCCS rationale would be eliminated through efficient duty rebates or a duty suspension system (indeed, many decentralized producers opt for duty rebates over DCCS). Lowering duties on imported fabrics and materials (elimination of duties in the case of U.S. and SADC fabrics and yarns) would further reduce the need for DCCS, by putting pressure downward on domestic textile prices. The long-term vision of the Department of Trade and Industry could be to move toward efficient allocation of resources such that producers can compete at world prices. DCCS is a stopgap measure that has been in place for 10 years or more.

A primary concern with DCCS in the near-term is that it has questionable effects on attracting foreign/new investment, and instead is reported to favour established producers in the centralized areas. As such, it has encouraged these producers to remain in high cost manufacturing areas, rather than seek lower costs in decentralized areas. DCCS has likely retarded producer's movement away from the centralized high cost areas.

A program that would have greater impact on near-term exports would be one that makes funds available when production decisions are being made, rather than months (some say more than a year), after production has taken place. The DCCS funds could be applied effectively to an export financing arrangement that is available to all firms, whether foreign and domestic in order to provide cash when it is most needed.

2.1.5 The Motor Industry Development Program (MIDP)

The Motor Industry Development Program (MIDP) is a system of incentives based on selective import duty reductions, and which provides substantial subsidies to investment and exports in return for the production and sale of motor vehicles in the protected domestic market (Flatters, 2002).

The MIDP differs radically from the previous incentive schemes that it replaced (such as Phase VI of the Local Content Programme), which measured local content on domestically produced vehicles and components by weight and not value, besides anticipating the rationalization of the number of vehicle models produced in South Africa. Whereas the motor industry was ineligible for subsidies under the General Export Incentive Scheme (GEIS), local manufacturers stood to benefit from an import/export incentive scheme. This involved local manufacturers rebating the cost of imported components against the value of their exports. Import/export complementation was further enhanced under the Motor Industry Development Program (MIDP), with exporters of vehicles and components earning export credits to offset the import of vehicles and components.

Among the main features of the MIDP were the reduction of tariff protection on Fully Built-up vehicles (FBUs) from an effective 115 per cent in 1994 to 65 per cent in July 1995, 61 per cent in January 1996,

and ultimately 40 per cent by 2002. Similarly, duty on completely knocked down (CKD) kits would fall to 49 per cent over the same time span, with the ultimate objective of enhancing international competitiveness. In addition, the MIDP also aimed to reduce the number of locally produced vehicle models from 39 to 15 between 1995-2003, with duty free incentives being used to enhance the sale of high volume models at the expense of low model ones.

The MIDP also allowed a manufacturer of motor vehicles to import one Rand's (R1) worth of vehicles or components duty free for every Rand of local content exported in the form of vehicles; similarly, for every Rand's worth of components exported, the exporter would be allowed to import R0.75 worth of motor vehicles and R1 of components duty free. Further, a small vehicle incentive was introduced, which involved a duty free allowance in respect of a net ex-factory selling price of R40 000, calculated on the basis of $([R40\ 000\ \text{ex-factory selling price}] \times 0.003 \times \text{ex-factory selling price})$.

For every Rand of local content FBU exports, the import costs for vehicles after tariffs per Rand of imports free on board (FOB) of local manufacturers in 1996 would be reduced by R0.61. This implies an export incentive (or looking at it differently, an import advantage) of 61 per cent for FBUs. In the same vein, there would be a 35 per cent export incentive applicable in 1996 to components used to offset vehicle imports. The report further adds that, by the year 2002, the incentive to export FBUs and components would have fallen, in accordance with the lowering of tariffs, to 40 per cent and 23 per cent respectively, as compared to an export incentive of 50 per cent of local content under the defunct Phase VI program.

Other objectives of the MIDP included the facilitation of locally manufactured vehicles and components (MITG, 1994). This was done with the aim of enhancing economies of scale and promoting effective capacity utilization. The MIDP was also envisaged to develop human resources and productivity, with the ultimate aim of ensuring stable employment in the longer term (MITG, 1994).

Following the Mid-Term Review conducted in 2002, it was agreed that the MIDP would be extended until 2007, albeit with a number of adjustments that have effectively reduced the value of the incentives therein (see Table 2). However, it is anticipated that this reduction in the value of incentives will be offset by the introduction of a Productive Asset Allowance (PAA) that grants import duty credits to the value of 20 per cent of qualifying⁴ new capital investments, with the duty relief staggered over a four-year period from the date of investment (Flatters, 2002).

Table 3: The MIDP as Amended in the Mid-Term Review

Year	2002	2003	2004	2005	2006	2007
------	------	------	------	------	------	------

⁴ In order to qualify for the PAA, an investment must result in an increase in the scale of production of a particular product line, and increase production for exports, effectively rendering the PAA conditional to a firm's export performance (Flatters, 2002).

CBU Duty (Light vehicles)	40%	38%	36%	34%	32%	30%
CKD duty	30%	29%	28%	27%	26%	25%
Qualifying value of eligible Export Performance	100%	94%	88%	82%	76%	70%
Components, heavy duty vehicles & tooling exported: CBU light vehicles imported	100:65	100:60	100:60	100:60	100:60	100:60
Qualifying Precious Metal Content in Catalytic Converters	50%	40%	40%	40%	40%	40%
Productive asset allowance	20%	20%	20%	20%	20%	20%

Source: Black (2002)

The main elements of the MIDP, therefore, are falling protection and export assistance derived from the ability to offset import duties. While nominal duties on imported vehicles remain moderately high, the ability to rebate import duties by exporting enables importers to bring in vehicles at lower effective rates of duty. Import-export complementation also enables assemblers to use import credits to source components at close to international prices, so declining nominal protection on vehicles has to some extent been offset by reduced protection for components. This means that there is still a significant incentive to assemble locally.

The MIDP endeavours to provide high quality affordable vehicles, provide sustainable employment and through increased production contribute to economic growth (Department of Trade and Industry, 2001). These, of course, are generic objectives, which are important to all sectors. More specifically, the MIDP is a trade facilitating measure with very particular industry policy objectives. Because of protection, the industry structure has historically been very fragmented and the resultant failure to achieve economies of scale has not only made the assembly industry inefficient, but has imposed major negative externalities on the component sector.⁵ Therefore, the MIDP seeks to increase the volume and scale of production through a greater level of specialization in terms of both vehicle models and components. Higher vehicle volumes allow for the attainment of economies of scale for component producers moving them further down their respective cost curves and enabling a higher level of localization on an economic basis. In turn, this would bring down assembly costs further. The route to achieving this is by encouraging a phased integration into the global automotive industry.

The provisions of the MIDP could promote this process in two ways. Firstly, tariff reductions create greater competitive pressure, which forces industry rationalization. Secondly, the provisions of the MIDP assist assemblers to enter export markets (thus achieving high volumes in selected vehicles) and to then import a portion of their requirements in order to maintain a full model range in the domestic market.

Essentially what is required is a transition from ‘completely knocked down (CKD) assembly’, which has typically been characteristic of vehicle production in protected developing country markets, eventually to

⁵ See Black (2001) for more detail on this question.

'full manufacturing'. 'CKD assembly' involves relatively light investments and production costs are usually quite high especially if a high level of localization is stipulated. Quality is frequently below international standards and assemblers may well introduce their own adaptations usually with the purpose of extending model life. As a result, in many protected, emerging economy markets, models continue in production long after they have been phased out in advanced countries.

Since the unveiling of the MIDP in 1995, there have been far-reaching changes in the automotive sector. For instance, there has been a surge in the importation of motor vehicles, largely due to the use of duty-free credits (Black, 2002). However, the bulk of new firms established to export components do not supply domestic assemblers and it seems therefore that new models would have to rely more heavily on imported components. In the process, a market has developed for export credits. Component firms are able to sell credits for cash or exchange them on a quid pro quo basis to get favourable international contracts, or be introduced to international clients.

Similarly, there has been some rationalization of the sector, with the large volume of output now arising from fewer model platforms, together with cost-cutting measures being implemented by domestic firms. Between 1995 and 2001, the total domestic production of vehicles has risen from 242 000 units in 1995 to 320 000 units at the end of 2001, and in addition, exports have risen more than tenfold, from 9,000 to 115,000. The share of exports in total sector production has further grown from just four per cent to 36 per cent, and significant investments by multinational corporations in the sector have been undertaken, or are in the pipeline. For example, during 2001 South Africa exported, R11 billion worth of automobiles with an engine capacity between 1500cc and 3000cc while importing R4 billion worth of these vehicles.

Flatters (2002) also argues that the MIDP has, more significantly, removed the anti-export bias previously inherent in the sector, and in addition provided a significant subsidy to exporters of vehicles and components, with the effective protection on vehicle exporters now in the region of 30 per cent to 40 per cent and for component exporters between 26 per cent and 30 per cent. The present structure of import duties on vehicles and components, together with the MIDP, has also resulted in substantial effective protection on vehicles destined for the domestic market, ranging from 62 per cent to over 100 per cent.

On the face of it, while the nature of the MIDP renders it an implicit subsidy on the Motor Vehicles, Parts and Accessories sector, and therefore technically in violation of existing rules on subsidies, it must be recalled that in terms of South Africa's accession to the WTO, this sector, together with the clothing and textile sectors were treated differently from other sectors of the South African economy, due to their strategic importance to the South African economy.

2.2 Measures Directly Affecting Production and Trade

2.2.1 Industrial Development Zones

Industrial Development Zones (IDZs) are purpose-built export processing zones set up by the South African government as a tool for attracting foreign direct investment in export-driven industries. They are usually established within the vicinity of airports or seaports and are characterized by world-class infrastructure, services and logistics networks⁶.

Among the features of South Africa's IDZ program are customs and financial incentives (such as duty-free importation of capital goods and inputs, together with value-added tax suspension for procurement of supplies within South Africa, with tax incentives being conspicuously absent. In addition to a customs secured area that provides on-site support on customs and excise requirements for firms in the IDZs, there are also industrial and services areas that provide support services to large manufacturers, and a one-stop centre facilitating regulatory procedures and requirements.

At present, IDZs in Coega, Port Elizabeth, and East London have received operator's permits, while other designated areas include Johannesburg International Airport and Richard's Bay, north of Durban.

2.2.2 Spatial Development Initiatives

Spatial Development Initiatives (SDIs) are geared towards the generation of sustainable economic growth in relatively underdeveloped areas, with the aim of exploiting the under-utilized locational and economic advantages for export-oriented growth (WTO, 2003). These are by and large located within South Africa's boundaries, although there are some cross-border initiatives that include neighbouring states such as Mozambique and Swaziland. SDIs, which are envisaged to operate hand in glove with IDZs, are seen as instrumental in reorienting traditional export processing zone strategies towards the development of leading-edge industrial development zones closely integrated with the local productive sector.

2.2.3 Small Medium Enterprise Development Program

The Small and Medium Enterprise Development Programme (SMEDP) is a grant paid to local and foreign investors to grow their current operations, based on approved qualifying assets and activities/projects, and is open to local and foreign investors engaged in manufacturing, high value agricultural projects, agro-processing, aquaculture, bio-technology, tourism, information and communication technology, recycling, and cultural industries.

Eligibility for this scheme is restricted to incorporated legal entities such as Companies (Private and Public), Close Corporations (CCs), Co-operatives (co-ops), Sole Proprietorships and Partnerships. Any

⁶ Sunday Times Business Times, 27 April 2003.

entities formed by the same owners or members to engage in more than one independent project in the same industrial area to manufacture the same generic product are specifically excluded from this scheme. In addition, projects may not qualify for both the SIP and the SMEDP program simultaneously—approval for support under one program precluded the conversion of incentive approval to another.

Furthermore, projects qualifying for the SMEDP must further be new (Greenfield) or an expansion of existing qualifying projects, and must not be for the purposes of expansion if the maximum allowance of R100 million is exceeded in terms of qualifying assets prior to the investment in expansion. The minimum and maximum threshold of assistance granted to the firm is based on the amount of qualifying assets that it possesses. The minimum equity requirement is 10 per cent for projects with qualifying fixed assets up to R5 million. For firms with qualifying fixed assets between R15 million-R25 million, the minimum threshold is 25 per cent, which for those firms with qualifying fixed assets above R15 million this threshold is raised to 35 per cent. In addition, assistance is only rendered to projects with an investment of up to R100 million in qualifying assets if the R100 million limit has already been attained with the initial investment in qualifying assets prior to the investment.

Eligibility for assistance under the SMEDP is limited to an overall maximum period of 36 consecutive months, the first two years on approved qualifying assets and an additional year grant for the Human Resource Intensity.

2.2.4 Strategic Investment Projects (SIP) Program

In recognition of South Africa's status as a growing economy and its current stage of transition and economic development, the SPI program was formally promulgated in August 2001. At the heart of this scheme is an attempt to raise levels of private sector investment in innovative, profitable and wealth-creating business enterprises in South Africa, while simultaneously creating job opportunities within the industrial sector.

R3 billion has been allocated for a four-year period beginning August 2001, in the form of tax allowances that are intended to lower the cost of investing in critical industrial projects. As this program has been tailored with the prospective individual investor's needs in mind, whether local or foreign, its primary aim is to significantly contribute to the growth, development and competitiveness of specific industry sectors by providing industrial investment allowances, in the form of tax relief, to qualifying industrial projects.

In order to qualify for the SIP, firms must be involved in the manufacture of goods (excluding tobacco and tobacco related products), computer and computer related activities (such as hardware and software consultancy, data processing, database activities but excluding secretarial services) and research and development (R&D) in natural sciences and engineering.

Further qualification criteria for proposed projects under the SIP include the scale of the investment (which should exceed R50 million), an increase in annual production of the relevant sector, demonstrable long-term commercial viability and the promotion of employment within the relevant economic sector. In addition, projects must not be currently benefiting from any other incentive schemes provided for under existing legislation.

The allowances are granted up to 100 per cent of the cost incurred by the company in acquiring, erecting, constructing, installing and/or effecting improvements to qualifying industrial assets. The SIP is managed by The Enterprise Organization (TEO) of the Department of Trade and Industry, in terms of the Income Tax Act (Act NO58 of 1962, as amended) and Regulations 22848 of 21 November 2001.

Recent reports suggest that while the registration process for the SIP is tedious and cumbersome, to date 14 000 new jobs have been created and R3 billion in new investment has been attracted to South Africa⁷.

⁷ *SIP's Tasty Tax Benefits*, Financial Mail, March 28 2003
An Analysis and Review of Subsidies in Southern Africa
The Case of the Southern African Customs Union (SACU)

2.2.5 Producer Support Estimates (PSE)⁸

The importance of agriculture in SACU stems from the fact that besides being a major employer, especially of low-skilled labour, it also makes a significant contribution, to the economy, through upstream (backward) and forward (downstream) linkages with the manufacturing sector. Whereas it has a small and decreasing share of GDP, standing at 2.8 per cent in 2001, the agricultural sector contributed 8.2 per cent of total merchandise exports and employed 11 per cent of the total labour force.

Since the late 1980s, the agricultural sector, particularly in South Africa, has undergone significant and radical reform, with all marketing boards being abolished and Quantitative Restrictions (QRs) being tariffed and further reduced. Most agricultural imports were regulated by quantitative controls prior to 1992, after which the process of tariffication and subsequent scaling down of tariffs began. The process of deregulation of agricultural marketing in South Africa started before the Uruguay Round was implemented in 1995 (Steenkamp, 1999). The process of exposure of farmers to a deregulated environment in which government support was progressively eliminated went beyond South Africa's WTO commitments and arguably has had more far reaching consequences for South Africa's farmers than the URAA. A total of 23 control boards regulated the agricultural industry prior to deregulation. The new Marketing of Agricultural Products Act of 1996 enforced the abolishment of the Control Boards.

It has been estimated by the National Department of Agriculture that the level of government support—the Producer Support Estimate (PSE)—for the agricultural sector has been declining since the mid-1980s, Producer Support Estimate as the process of deregulation in the agricultural sector progressed. The most recent calculation of the PSE for South African agriculture, for the 1995 production year, indicated that the aggregate PSE for agriculture was 12.14 per cent of sectoral value-added, representing one of the lowest levels of support to agriculture in the world.

Due to the process of deregulation and liberalization, the percentage PSE (lately mainly tariff distortions) have consistently declined, and by 1998, most commodities had practically no domestic support in the form of policy interference, with the exception of a few highly protected commodities, namely Sugar (40 per cent), Dairy (20 per cent), Beef and Veal (20 per cent), Mutton (50 per cent) and Wheat (20 per cent).

Kirsten *et al.* (2000) calculated PSEs for 17 commodities that collectively make up 69 per cent of the gross total value of agricultural protection in South Africa,⁹ and which have been the main recipients of government and market support, and hence the main focus of deregulation and scaling down efforts. Using the recently revised PSE approach, Kirsten *et al.* included the following categories of agricultural policy measures in their calculations:

⁸ This discussion on Producer Support Estimates is based on a paper by Kirsten *et al.* (2000).

⁹ These are Wheat, Maize, Other grains (Barley, Oats, Sorghum), Oilseed (Groundnuts, Sunflower seed, Soya beans, Sugar (refined equivalent), Milk, Beef, Veal, Pig Meat, Mutton, Wool and Eggs.

Measures that transfer money to producers through affecting producer and consumer prices simultaneously (market price support);

Measures that transfer money directly from taxpayers to producers without raising prices to consumers (direct payments);

Measures that transfer money to producers through lowering input costs (reduction of input costs);

Measures that reduce costs to the agricultural sector as a whole and are not received directly by producers (general services); and

Other measures, the main elements of which are sub-national (e.g. measures funded by state or provincial governments) and certain tax concessions (other support).

On the basis of this approach, policy measures are classified as follows:

I Producer Support Estimate (PSE) [Sum of A to H]

Market price support

Payments based on output

Payments based on area planted/animal numbers

Payments based on historical entitlements

Payments based on input use

Based on use of variable inputs

Based on use of on-farm services

Based on use of fixed inputs

Payments based on input constraints

Based on constraints on variable inputs

Based on constraints on fixed inputs

Based on constraints on a set of inputs

Payments based on overall farming income

Miscellaneous payments

II General Support Estimate (GSSE) [Sum of I to O]

Research and development

Agricultural Schools (training)

Inspection services

Infrastructure
Marketing and promotion
Public Stockholding
Miscellaneous

As South Africa has no measures or payments in categories B to D, the overall expenditure of the National Department of Agriculture and provincial agricultural departments was classified into the remaining categories E to H and I to O. On the basis of the assumption that there was declining support to the agricultural sector due to deregulation and abolition of marketing boards, there was found to be little support in the PSE category.

However, it appears that the biggest chunk of support lay in the General Support Estimate (GSSE) category, which does not influence the computation of the PSE, and by extension, farmers' incomes. Kirsten *et al.* (2000) argue that more than 91 per cent of total government expenditure in the 1998/1999 year could be classified under the GSSE.

Government expenditure on agriculture can be classified as follows:

Payments based on input use: This includes all input subsidies, interest concessions and cost reductions as a result of irrigation water schemes, etc., together with the bulk of financial aid to emerging farmers;

Payments based on input constraints: During the 1996–1998 period the government(s) spent some funds on alleviating a number of constraints relating to the use of variable inputs and also acquiring fixed structures on farm. These expenditures were largely incurred under the BATAT framework but featured in a number of programs; and

Payments based on overall farming income: Payments under this category related to tax concessions, disaster payments and as well as drought assistance schemes

All other government expenditures such as the annual ARC allocation, administration, veterinary services, soil conservation works, extension services, etc. were all included under general support services - these payments have no impact on the PSE as they are not related to any commodity and therefore do not impact on the income of farmers.

The summary of the totals of the classifications is provided in Table 4.

Table 4: Classification of South African agricultural budget expenditures according to the OECD categories (1996/97 – 1998/99) (Rand)

Programme classification	1996	1997	1998
E. Payments based on input use			
1. Based on use of variable inputs	224,185,000	203,081,000	125,019,000
2. Based on use of on-farm services	31,600,000	0	0
3. Based on on-farm investment	14,085,000	65,365,756	62,043,000
F. Payments based on input constraints			
1. Based on constraints on variable inputs	0	0	0
2. Based on constraints on fixed inputs	0	0	0
3. Based on constraints on a set of inputs	0	0	0
G. Payments based on overall farming income			
1. Based on farm income level	75,111,484	28,230,588	14,072,000
2. Based on established minimum income	0	0	0
H. Miscellaneous payments	0	0	0
1. National payments	0	0	0
2. Sub-national payments	0	0	0
General Services Support Equivalent (GSSE)			
I. Research and development	1,099,653,900	929,989,500	825,190,000
J. Agricultural Schools	37,021,000	53,683,000	43,128,000
K. Inspection services	177,636,400	335,101,000	320,325,000
L. Infrastructure	247,991,900	200,645,800	200,547,000
M. Marketing and promotion	81,496,000	14,546,000	39,038,000
N. Public stockholding	0	0	0
O. General admin.	479,540,750	640,523,700	592,594,000
P. Land use planning*	15,471,000	31,797,000	14,369,000
Q. Community projects*	20,217,000	28,882,000	0
Total	2,504,009,434	2,531,845,344	2,236,325,000

* These categories were added since the expenditure did not fit the OECD classifications

Source: Kirsten et al. (2000)

The most important component of the PSE calculation relates to the calculation of market price support, requiring data on production levels, producer prices and appropriate world prices. Kirsten et al. (2000) found that the PSE results obtained per commodity are consistent with existing levels of protection. For example, the high duty payable on sugar as well as the industry level payments is reflected in the high positive PSE results obtained. The same applied to some of the meat commodities, where an import tariff of 40 per cent also resulted in positive PSEs. In the case of oats and barley, where no such tariffs or duties apply, the PSE was found to be highly negative.

The high annual variability of the PSE results for some commodities needs to be noted. For verification purposes it may be necessary to relate this variation to policy changes, specifically those related to trade and also to the change in world reference prices. For example, the low and negative PSE calculated in 1996 for grains and oilseeds can be explained by the high international commodity prices of that year. The results of the PSE calculations per commodity are summarized below:

Table 5: Total PSE per commodity (Rand)

Commodity	1996	% of PSE expenditure, 1996	1997	% of PSE expenditure, 1997	1998	% of PSE expenditure, 1998
Wheat	-310,557,050	-21.7	360,700,914	16.09	482,788,355	19.44
Maize	-633,244,016	-9.68	-94,658,142	-1.55	-761,566,441	-18.25
Barley	-78,625,306	-41.14	-15,405,826	-13.25	27,454,518	-12.34
Oats	-29,224,049	-290.41	-7,450,957	-75.58	-13,870,856	-140.28
Grain sorghum	-86,027,910	-38.73	-32,894,707	-16.48	-25,569,171	-15.56
Total other Grains	-193,877,265	-123.427	-55,751,490	-35.1033	-11,985,509	-56.06
Sunflower seed	-282,548,565	-41.18	-233,050,241	-49.04	-86,667,080	-10.79
Groundnuts	-242,702,060	-79.71	-145,998,358	-92.77	-183,253,334	-92.24
Soya beans	1,992,105	2.04	17,376,844	10.31	-85,993,349	-38.91
Total Oil Seeds	-523,258,520	-152.34	-361,671,755	-90.7367	-355,913,763	-137.107
Sugar	1,679,922,613	39.60	2,252,246,826	42.62	2,161,785,157	39.55
Dairy	57,214,783	2.85	436,361,142	16.39	549,247,183	20.92
Beef and Veal	351,812,834	10.77	435,357,865	13.64	679,481,016	21.20
Pig Meat	-232,507,673	-27.43	-113,015,877	-11.99	-271,513	-0.03
Poultry	230,303,612	3.38	557,995,680	6.23	-	-15.78
Sheep meat	142,664,802	47.66	111,016,015	40.36	1,562,008,379	49.28
Wool	5,036,730	0.42	3,856,805	0.34	114,090,248	14.97
Eggs	-37,896,866	-9.02	41,574,018	9.38	172,975,240	14.97
Livestock Products	516,628,221	4.09	1,473,145,649	10.62	-117,830,474	-32.41
Total PSE for SA (R)	535,613,983	1.78	3,574,012,002	10.89	1,350,791,120	4.18

Source: Kirsten *et al.* (2000)

The above PSE calculations confirm the declining levels of government and market support to the agricultural sector. The 1998 figure of 4.18 per cent (or revised figure of 5.16 per cent) is substantially lower than countries such as Australia (6.8 per cent), Canada (16.1 per cent), the United States (21.6 per cent) and 45.3 per cent for the EU (Kirsten *et al.*, 2000)

Due to the limited influence of government expenditures on the PSE results for South African agriculture, Kirsten et al. (2000) anticipate that the percentage of PSE per commodity will vary according to the market price support, which could be influenced by tariffs. Variations in the world reference price therefore play a critical role in the PSE calculations¹⁰ (See Appendix 1). It is furthermore important to note that 10 of the 17 commodities analyzed have negative PSEs. This gives a further dramatic account of the extent of deregulation in South African agriculture.

In place of the Control Boards, there now exists an agricultural futures market, which enables farmers to manage the risks inherent in the sector, and in addition, the Agro-industries Development Finance Scheme has been established to assist local producers develop agricultural, food, beverage and marine activities (WTO, 2003).

2.3 Subsidies and the Environment – The Energy Sector¹¹

South Africa is regarded as a comparatively energy- and carbon-intensive country in relation to other African countries as well as relative to many developed countries. Of the total energy consumption in 1998, 78 per cent was from coal, demonstrating a high reliance on a highly carbon-intensive fossil fuel with negative impacts on the environment (EIA: 2001).

There has been an upward trend in electricity generation in South Africa between 1990-2000, with an increase of approximately 40 per cent during this period (Table 6).

Table 6: Electricity Generation and Consumption in South Africa, 1990-2000 (billion kWh)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Net Generation	247.6	256.2	247.3	258.4	272.3	288.4	297.1	324.6	322.0	320.2	326.1
Hydroelectric	1.0	2.0	0.8	0.1	1.1	0.5	1.3	2.1	1.6	0.7	1.3
Nuclear	8.4	9.1	9.3	7.3	9.7	11.3	11.8	12.6	13.6	12.8	13.0
Geo/solar/wind/ biomass	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
Conventional Thermal	146.6	147.8	147.1	155.9	160.0	164.2	173.9	181.1	176.5	173.3	180.0
Net Consumption	143.8	146.1	144.6	149.4	156.2	160.9	168.3	175.6	175.8	176.0	181.5
Imports	0.3	0.3	0.3	0.1	0.1	0.1	0.0	0.0	2.6	6.7	5.3
Exports	1.6	1.9	1.8	2.6	2.6	3.0	5.6	6.6	5.1	4.5	4.5

N/a - not applicable; generation components may not add to total due to rounding.

Source: Eberhard (2002)

¹⁰ Kirsten *et al.* (2000) illustrate this point by giving the example of the calculations for beef and veal - when the reference price is changed to EU FOB prices (good quality beef) the 1998 PSE changes to -61.73% from +21.20% when the reference price was based on low quality beef imports from the EU.

¹¹ This discussion draws liberally on Eberhard (2002).

Table 7 shows the total amount of coal produced and consumed in South Africa between 1990 and 2000. More than 85 per cent of the coal produced is used for electricity generation. Coal is also directly used by other sectors including gold mining, cement industry, brick and tile industry, metallurgical industry, and for domestic use as a source of energy.

Table 7: Coal Production and Consumption in South Africa, 1990-2000 (in millions of short tons)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Production	247.6	256.2	247.3	258.4	272.3	288.4	297.1	324.6	322.0	320.2	326.1
Anthracite	6.1	4.9	6.1	5.7	4.5	3.6	3.9	4.4	2.9	2.7	3.4
Bituminous	241.5	251.3	241.2	252.7	267.9	284.8	293.2	320.1	319.1	317.4	322.7
Lignite	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a	N/a
Consumption	193.5	153.1	151.8	156.2	158.1	172.8	165.7	178.1	187.0	174.6	176.3

N/a - not applicable
Source: Eberhard (2002)

The electricity sector in South Africa is a concentrated, regulated, and largely publicly-owned sector, which is dominated by the government-owned Eskom. Eskom currently controls a near-monopoly of generation and transmission, with more than 95 per cent of total market share, 98 per cent of generating capacity, and virtually 100 per cent of transmission assets. In addition, it controls 75 per cent of the distribution market. At the distribution level, the 400+ local municipalities are forced to buy from the Eskom distribution network and are thus vertically integrated into Eskom's monopoly.

Among Eskom's domestic customers are commercial farmers, a large number of residential consumers, local municipal authorities (who distribute to consumers within their boundaries), manufacturing and mining industries. Manufacturing is the largest consumer of electricity in South Africa, accounting for 44 per cent of consumption. Mining and residential customers each account for 18 per cent of demand, with another nine per cent going to commercial customers. Residential consumption presently accounts for the fastest growth, owing to South Africa's success with rural electrification. With more residential consumers being connected to the national grid, there has been in turn a heightened demand during peak periods, and this has had a significant impact on the shape of the country's load profile.

The production, transformation and use of energy generate substantial environmental impacts in South Africa, with the coal fuel cycle being the dominant source of air pollution and overall waste generation in South Africa. Liquid fuels in the transport sector are the second major source of air pollution whereas in the rural areas the major pollution related problem among households is related to indoor pollution resulting from the inefficient burning of low quality fuels, mainly wood and coal which affect health and visibility adversely.

Much has been said about the adverse effects and externalities around coal based production. For example, the mining, processing and conversion into power of coal have various adverse effects on the environment, ranging from direct health hazards, to accidents, ecosystem disruptions, and air and water pollution (TIPS/IISD: 1999). The burning of coal releases large quantities of sulphur dioxide, nitrogen oxide, particulates and carbon dioxide into the air, which damages the ozone layer.

South Africa participated in and ratified the 1998 United Nations Framework Convention on Climate Change (UNFCCC), wherein government delegates, NGOs, businesses and civil society bound themselves to reducing and stabilizing greenhouse gas (GHG) emissions below levels that would prevent dangerous human-induced climate change. Eskom identified focus areas for immediate attention including, inter alia, the development of a Climate Change Policy, the evaluation of potential Clean Development Mechanism (CDM) projects and the adoption of integrated electricity planning, among other things.

South Africa was ranked 14th out of 170 countries on a cumulative aggregate tonnage of CO₂ emissions for the period 1950-1995, and ranked 22 out of the same number of countries in terms of energy consumption per unit GDP. One of the reasons for such a high-energy intensity is the country's reliance on thermal power.

It can be argued that in the presence of international multilateral agreements such as the Kyoto Protocol, potential barriers to trade and restricted access to markets via the application of environmental standards as well as consumer resistance to products on environmental grounds, industries could be motivated to use cleaner electricity, and Eskom might be compelled to adopt technologies for cleaner energy.

Table 7A indicates major emissions and consumables used in the production of 1kilowatt-hour of electricity. This is an equivalent of using a 100-watt light bulb for 10 hours or 10 100-watt light bulbs for one hour. The table shows a slight decrease in the amount of elements used or emitted in the production of 1KW hour of electricity from 1999 to 2000 except for Nitrogen dioxide.

Table 7A: Environmental Implications of Using One kW Hour of Electricity

Element	1999	2000
Water usage	1.3litres	1.21litres
Coal usage	0.5kg	0.5kg
Ash produced	1.3g	130g
Ash emitted	0.4g	0.35g
SO ₂ Emissions	8.0g	8.0g
NO ₂ Emissions	3.0g	3. 6g
CO ₂ Emissions	1.0kg	0.9kg

Source: Eberhard (2002)

Table 8 shows an increase in GHG emissions from 1993 to 2000. This can be attributed to an increase in the amount of coal burnt during the electricity production process. The high volume of water used during electricity production is attributed to the wet cooling system. Dry-cooled power stations use relatively less water than wet-cooled ones but emit more particulates.

In 2000, Eskom's coal-fired power stations consumed a total of 228,759 mega-litres of water from government water schemes to produce 189,307 gigawatt-hours of electricity, compared with 223,650 mega-litres of water that was used to produce 154 260 gigawatt-hours of electricity in 1993. The mining of coal impacts negatively on the environment, through the leaching of chemical substances from coal dumps which might contaminate water (Eskom: 1998). Water pollution also comes from oil spills and ash spills. For instance, in 1998 Eskom had eight water-related contraventions of legislation. There were four ash spills; two oil spills from substations and two underground cable oil spills (Eskom, 1998).

Eskom operates an air quality management system with a network of 43 particulate emissions monitors. The ability to keep track of particulate emissions on a continuous basis contributed to a 46 per cent reduction in particulate emissions from 1993 to 2000.

Table 8: Other environmental aspects of Eskom's activities

Operations	Unit	1993	1994	1995	1996	1997	1998	1999	2000
Electricity produced by stations	Gigaw-hours net	154260	160293	164834	178855	187811	183093	181818	189307
Total electricity sold	Gigaw-hours	143800	149443	153547	165370	172550	171454	173422	178192
Coal burnt in power stations	Million tons	75.9	76.9	79.4	85.4	90.2	87.2	88.5	92.3
Water consumed by power stations	Million litres	223650	213220	214329	215199	224754	224457	226387	228759
Emissions from Coal Fired Power Stations									
Nitrous Oxide N ₂ O	Tons	N/a	N/a	1864	2004	2085	2031	2010	2093
Carbon dioxide CO ₂	Million tons	141.0	143.0	147.0	159.0	169.0	163.0	159.4	161.2
Sulphur dioxide SO ₂	Thous tons	1134	1167	1198	1295	1382	1583	1506	1505
Nitrogen oxide N ₂ O	Thous tons	582	582	603	647	688	669	673	674
Particulate Emissions	Thous tons	122.2	122.0	115.3	112.1	83.43	65.21	67.08	66.08
Ash at Coal Fired Power Stations									
Ash produced	Million tons	20.9	22.1	23.0	22.2	23.7	24.7	24.3	24.6
Ash sales	Million tons	N/a	0.818	0.943	0.995	1.117	1.175	1.114	1.126
Koeberg Nuclear Power Station									
Radiation release (target less than 0,0025 mSv)	Millisieve rts	0.0297	0.0005	0.0004	0.0006	0.0006	0.0006	0.0006	0.0005
Low level waste (steel drums)	Cubic metres	100.80	85.47	73.29	109.06	107.54	61.25	70.77	68.81
Intermediate level waste (concrete drums)	Cubic metres	37.65	43.00	28.76	35.69	23.10	22.77	41.21	27.6

Source: Eberhard (2002)

With the advent of the Kyoto Protocol, the global trend has been to shift away from the burning of fossil fuels (coal, oil, gas) so as to reduce the emission of greenhouse gases and decrease global warming. The objective of the UNFCCC is to stabilize greenhouse gas concentrations to levels that would prevent dangerous anthropogenic (human induced) interference with the climate change system. South Africa is classified as a non-annex 1 signatory to the Convention, that is, as a developing country it is not subject to the same commitments as developed countries. One of the main obligations placed on developed countries, such as the U.S., EU 15, Australia, and Canada, is to reduce their greenhouse gases (GHGs) to an average level of five per cent below the 1990 levels by 2012. The first three greenhouse gases are carbon dioxide (CO₂), Methane (CH₄) and Nitrous Oxide (N₂O) (USDOE: 2002).

Table 9: Fossil Fuel-related Carbon Dioxide Emissions in South Africa, 1990-2000 (millions of metric tons of carbon)

Component	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
CO ₂ – Coal	93.85	69.67	69.75	71.36	71.19	78.19	73.48	89.74	94.23	85.62	86.12
CO ₂ – Natural gas	0.00	0.00	0.02	0.96	1.04	1.04	0.98	0.96	0.85	0.82	0.82
CO ₂ – Petroleum	14.93	15.96	16.43	16.11	16.25	16.52	16.85	16.39	17.46	18.34	18.91
Total CO ₂ Fossil fuels	108.79	85.63	86.20	88.43	88.48	95.75	91.31	107.09	112.54	104.79	105.85

Source: DOE/EIA

Note: components may not add up to total due to rounding

Table 9 reveals that burning coal releases the highest amount of carbon dioxide relative to other fossil fuels. Although there was a decrease in coal-related carbon dioxide emissions between 1991 and 1997 before peaking in 1998 and dropping again in 1999 and 2000, the levels are still relatively high in international terms.

While South Africa has considerably reduced particulates emission from power plants over the past decades, the country's sulphur dioxide and nitrogen oxide levels are considerably higher than those of any other country in the African continent. South Africa produces one-third of Africa's total energy-related carbon dioxide emissions though the country produces less than 1.5 per cent of the global total. As a simple function of increased energy use alone, pollution levels may grow rapidly over the next few decades despite improving efficiency and enhanced production techniques.

Concerns for the environment can however collide with goals for expanding economic activities in a country like South Africa. Carbon dioxide emissions are closely related to economic growth, industrialization and overall energy consumption. Until the last decade, the advanced countries were the largest contributors to the carbon dioxide emissions. In due recognition of this, policies and instruments for reducing carbon dioxide emissions were instituted in several advanced industrialized countries resulting in their share of carbon dioxide emissions declining. Since 1991, the developing countries have been responsible for more than 50 per cent of the world's carbon dioxide emissions. This share is expected to increase with greater industrialization and increased energy use per capita that accompanies the process.

The ability of developing countries, like South Africa, to respond to concerns about climate change are complicated by the fact that a greater majority of South Africans need to increase their living standards and this may depend on increased energy use per capita, which may in turn depend on increased reliance on fossil and other solid fuel like woods which have high carbon dioxide emissions.

In order to implement policies that can benefit both development and the environment, it is important to understand the various subcomponents of the process causing the increase in carbon dioxide emissions as well as the trends in the fuel mix due to the positive correlation between energy use and living standards.

2.3.1 Alternative Energy Sources

The key policy issue is as follows—if energy production in South Africa in its current form is not sustainable in the long term what should be done? Should there be a switch to alternative sources of energy? What incentives exist for this? What are these sources and at what costs? Who would bear these costs? There are many forms of renewable energy sources, namely solar energy, wind energy, wave energy, tidal energy, biomass, geothermal energy and hydropower. However the most likely sources of economical, efficient and safe energy at present are solar, nuclear, micro-hydro and wind. A brief summary of the prevalence of these forms of energy in South Africa follows.

Nuclear: South Africa is presently the only country in Africa that has a commercial nuclear power plant. The Koeberg Nuclear Power Plant, operated by Eskom, is located near Cape Town and was established in 1984. Koeberg accounts for approximately seven per cent of South Africa's electricity generation. The plant utilizes pressurized-water reactor (PWR) technology and has a licensed generating capacity of 1,840 MW.

The consequences of further enhancing nuclear power in South Africa is a source of important debate, but beyond our scope here. Suffice to say that there seems to be some consensus that the development of a nuclear power station has been costly (see Eberhard, 1994). Moreover, there are arguments that substituting nuclear for thermal is as good as substituting one environmental problem with another (see Law & McDaid 2001). Although there seem to be some advantages of nuclear production over coal mining, nuclear production still generates four to five times more greenhouse gas than renewable technologies.

Hydroelectric Power: With 10 per cent of its current primary energy supply considered to be renewable, South Africa exhibits great potential in this regard. The Orange River, which flows westward into the Atlantic Ocean, and the Limpopo River flowing eastward into the Indian Ocean form the two major river systems in South Africa. There are many other small rivers and tributaries that allow the construction of dams for water conservation. This facilitates the application of micro-hydro systems. There are an estimated 6000 to 8000 potential sites for small hydro projects with a capacity of about 100MW, most of them located in KwaZulu Natal and the Eastern Cape.

The largest hydroelectric power plant in South Africa is the 1,000 MW Drakensberg Pumped-Storage Facility, which is part of a larger scheme of water management bringing water into the Vaal watershed from the Tugela River, while the second-largest pumped-storage hydroelectric power plant is located on the Palmiet River not far from Cape Town.

Solar Energy: Solar dish-engine systems are said to convert sunlight into electricity at higher efficiencies than any other solar technology (Gordon, 2002). Solar energy is considered ideal because it is cheap and environmentally friendly. Most areas in South Africa receive an average of more than 2,500 hours of sunshine per year. Solar radiation levels range between 4.5 and 6.5-kilowatt hours (kWh) per square meter, on average, every day. A solar equipment industry is taking off with a number of companies involved in manufacturing solar water-heaters. The solar part of the SABRE-Gen program, the SABRE-Gen Solar Thermal Project, is evaluating the potential for using solar for electricity generation, for both grid-connected and off-grid applications.

South Africa has the potential to produce the lowest cost solar electricity in the world. In November 1998, Shell Solar South Africa and Eskom embarked on a multi-million dollar project to supply solar energy to 50,000 low cost housing units. These two companies will provide the infrastructure, while the communities will establish various ventures for supply and maintenance. As of the end of 2000, the joint venture has installed 6,000 solar home systems, bringing electricity to an estimated 30,000 people in the area. To make the systems affordable for residents, the joint venture is charging customers \$10 a month rather than billing customers for the cost and installation of the units.

Wind Energy: Wind is the fastest-growing power source in the world today. South Africa's installed capacity has grown from 2000MW in 1990 to 13,500MW at the end of 2000. While the costs of power from coal, large hydro and uranium are increasing - mainly as a result of environmental factors - wind power shows decreasing generation costs. At present, costs on a reasonably good wind site are around 0.35 Rand/kWh (US\$0.045/kWh), expected to come down to 0.27 Rand/kWh (US\$0.035/kWh) over the next 10 years and to 0.23 Rand/kWh (US\$0.03/kWh) by 2020 (WEA, 2000).

South Africa's wind resource indicates that the upper limit to the contribution of wind power to the grid is determined by quality-of-supply considerations. International indications are that this could readily be 20 per cent on a technically proficient network (Hartnell and Landberg, 2000), approximately six GW in South Africa if implemented today. The potential exists for the development of a local industry, and for increased use of local components and manufacturing.

Wind energy is already an important source of energy in South Africa, mainly in the agricultural sector. There are in excess of 300,000 predominantly locally manufactured wind-driven water pumps installed as a reliable and low-cost option for supply of water mostly to livestock. Both large-scale, grid-based electricity generation, and localized mini-grids and stand-alone systems have the recognized benefits of providing pollution-free electricity, reducing transmission costs, diversifying the energy mix and creating an opportunity for independent generation of power by new players in the market, such as municipalities, private businesses and communities. Wind energy can also help South Africa to respond to the increasing international pressure to reduce greenhouse gas emissions, and at the same time access the international financial resources that are allocated for these reductions.

Whereas the traditional, multi-bladed wind-powered pumps operate at the moderate wind speeds experienced over most of the country, sufficient wind resources for economical generation of electricity are only found along the coastline and the Drakensberg escarpment.

Mechanical water pumping windmills have been manufactured in South Africa since 1871. It is estimated that more than 300,000 windmills are installed, and that more than 90 per cent of these were manufactured locally. The wind pumps are situated in areas with mean annual wind speeds as low as three m/s. The water is used predominantly for livestock. The wind pumps are highly reliable, with an annual maintenance cost in the order of five per cent of capital cost, a lifetime of 30 years for components such as the gearbox, wheel and tail, stub tower and windmill tower, and 10 years for the pump itself (Karotki, Scahffler and Banks, 2001).

Biomass: The main non-hydro renewable energy source in South Africa is biomass. One-third of the population depends on firewood for their household heating and cooking needs. Firewood collected from forests as well as waste from sugar and lumber processing are the main supplies. There are five relatively small power stations in South Africa using process waste (bagasse) mixed with coal as fuel. These are all cogeneration facilities located at the sugar mills, and produce steam and electricity for captive use by those sugar mills; they produce about 0.2 per cent of the electricity consumed in South Africa.

Gas: One of the most under-utilized clean energy sources in southern Africa is gas. Compared to the international average of 20 per cent of the total energy usage, South Africa uses less than two per cent. Globally, natural gas usage has grown tremendously over the past 10 to 15 years—both because of the clean fuel image of gas and to alleviate dependence on coal.

The Department of Minerals and Energy has expressed a keen interest in promoting gas as an alternative energy source. In October 2001, a number of agreements were signed between Mozambique and South Africa to pave the way for introducing natural gas to South Africa. A Gas Bill will provide the national regulatory framework, legalizing and streamlining the gas activities between the two countries, such as issuing licences, promoting competition and approving tariffs. Exploration of the Pande and Temane gas fields in Mozambique is in progress. A start has been made with the construction of a pipeline to bring this gas to South Africa at an estimated cost of R10 billion. It is anticipated that by 2004 some 80 million gigajoules of gas will be imported by Sasol from the Pande-Temane gas fields (Giesen, 2001).

The Kudu Gas Cape Power Project is also being considered. If sufficient gas reserves are found, gas will be transported from the Kudu gas fields in Namibia via a pipeline to the Western Cape, where the gas will be converted to energy in a combined cycle gas turbine power station. Exploration of the Kudu gas fields is still in progress.

It is instructive to note, however, that there exists little by way of subsidies or incentives that would encourage a shift towards cleaner technology and renewable forms of electricity generation due to the low coal price. According to Eberhard (2000), in addition to the grid electrification program, there has been an active off-grid program using photovoltaic technology. Between 1994 and 2000, 1350 schools were electrified with off-grid systems. Many rural health clinics have been equipped with solar systems. In addition, government has awarded subsidy concessions to private industry service providers in five geographic areas to supply solar home systems as well as supplementary fuels such as liquid petroleum gas. These are not geographically exclusive concessions; other companies may also operate in the areas. However, the concessionaire in each geographic area will receive a subsidy of US\$320 per installation. The rationale is to assist service providers in building up adequate service infrastructure and to move towards financial sustainability. Supply targets and service standards have been set and performance will be monitored.

The concession contractual framework has been less than perfect. For example, there was little entry competition, and firms were not required to bid competitively on subsidy requirements. The opportunity to encourage efficiency and lower costs has not been maximized. Nevertheless, considerable innovation is emerging in the systems and vending technology employed. Most suppliers have adopted a fee-for-service approach rather than the outright sale of solar home systems.

2.3.2 The Social Impact of Cleaner Technologies

There is, to date, very little analysis and information about why renewable resources still comprise a very small fraction of total energy generated in South Africa. Naturally, there is need to delve into more detail to establish why, for instance, the use of solar energy is not as widespread as it ought to be. Casual evidence suggests, however, that the dominance of coal-based energy has created very few incentives in the market to enable the development of a competitive solar panel producing industry at affordable prices. It is important to understand why the current structure of energy production acts as a disincentive to other forms of energy.

Notwithstanding South Africa's cheap energy production and the over-investment in generation capacity, there is an urgent need to deal with the problem of coal-based energy in the light of various developments. Firstly, South Africa is responsible for 1.5 per cent of global greenhouse emissions, and a significant contributor on a per capita basis. Secondly, there is growing domestic awareness of the damaging health and environmental effects of coal-based energy. A third concern is the heightened

awareness by South African exporters of energy-intensive products such as steel and aluminium of increasingly stringent regulatory difficulties in international markets.

3 Foreign Subsidies

As mentioned in Section 1, the main markets for exports from the SACU region are the European Union (specifically Germany and the United Kingdom), and the United States of America. The bulk of SACU exports to the EU that are affected by subsidies in that region are mostly to be found in HS16-24 (see Appendix), and these are largely in the agricultural and agro-processing categories. Exports to the U.S. are mainly steel products, and both tariff barriers and subsidies to U.S. steel manufacturers too, have affected these.

3.1 Agricultural Sector Subsidies

Table 10: Indicators of trade barriers facing developing countries in the EU, U.S., Canada and Japan

	EU	U.S.	Canada	Japan
% Share of developing country exports subject to tariffs >15%	4.9	6.6	4.8	2.8
Percentage share of imports from LDCs subject to tariffs >15%	2.8	15.0	30.2	2.6
Average MFN tariffs applied to products subject to tariff peak >15%	40.3	20.8	30.5	27.8
Highest tariff peak 1999 (%)	252 (meat products)	121 (groundnuts)	120 (meat products)	170 (raw cane sugar)
Producer Support Estimate (PSE) as % of farm income, 1998-2000	40	23	18	63
Extent of tariff escalation on agricultural products post UR (average tariff on processed products as a multiple of average tariff on unprocessed products)	2.75	1.25	3.00	3.75
Average agricultural tariff - simple average post-UR bound rate	20.0	9.0	8.8	29.7
MFA phase-out: % restrained imports liberalised by 2002 compared to ATC target	24	23	Not available	–
Average tariff on textiles and clothing: simple average post-UR bound rate	7.9	8.9	12.4	6.8
Number of anti-dumping actions initiated against developing countries 1 July 1995-30 June 2002	145	89	22	0
Overall ranking based on protectionist policies (most protectionist to least protectionist)	1	2	3	4

Source: Oxfam (2002)

As Table 10 suggests, the EU is the most protectionist of the “Quad” countries, followed by the U.S., Canada, and lastly Japan.

3.1.1 The Common Agricultural Policy

The main vehicle for agricultural sector subsidies in the EU is embodied in the Common Agricultural Policy (CAP), which had the initial objectives of inter alia:

- Increasing agricultural productivity;
- Ensuring fair living standards for the agricultural community;
- Stabilizing markets for agricultural produce;
- Securing the supply of food; and
- Ensuring affordability of prices for consumers.

Through a complex price support system, the EU guaranteed a target price for each agricultural product that was above the equilibrium price—when world prices fell below this price, then a variable levy would be imposed on non-EU farm produce in order to bring non-EU import prices to the level of the EU price. EU producers then set their annual supply according to this guaranteed price. In the event of a glut, the surplus would be stored, and released in times of shortage. The ultimate aim of the CAP was to ensure continuity in supply, guaranteed farm incomes and little or no variation in price. Any produce exported would also mean subsidies for farmers, ensuring that all farm produce was sold at a fixed price.

However, the CAP soon encountered problems as improvements in technology and productivity smoothed out the alternating pattern of surpluses and shortages—and mounting surpluses became a huge cost to the EU budget, in terms of payments to farmers and storage/destruction costs. In addition, the prices paid by consumers were way above the equilibrium price.

CAP reforms were instituted in 1986, through the introduction of quotas for beef and dairy products. In addition, large farmers were paid to let their lands lie idle or shift to other forms of economic activity. With the advent of the WTO, both export subsidies and import levies have been reduced, with farmers now receiving more in the form of income support as opposed to artificially high prices. While the overall cost of the CAP still remains at approximately 45 per cent of the total EU budget, it still remains high, at about €41.5 billion (ActionAid, 2002). Moreover, the original objectives of the CAP have largely been met by dumping of agricultural exports (at prices below the cost of production) in world markets—the brunt has mainly been borne by farmers in developing countries, who not only have to contend with low prices for their produce, but also lose market share. It has been estimated that the EU is the world's most prolific user of export subsidies (ActionAid, 2002).

3.1.2 Impact of the CAP on the Domestic Sugar Sub-Sector

The first impact of the CAP on the domestic agricultural sector is manifest in the sugar industry of South Africa and Swaziland.

For South Africa, sugar cane realized the highest proportion of all agricultural exports by value (56 per cent of the total) in 2001, and accounted for 22 per cent of gross income from farm crops. In addition, the proportion of total sugar production that is exported increased from 53 per cent in 1999/2000 to 55 per cent in 2000/2001 (WTO, 2003).

In the case of Swaziland, the integral place occupied by the sugar industry in the economy is underscored by the fact that it accounted for over 50 per cent of all farm output in 2001, 18 per cent of national output and 11 per cent of national wage employment in 2001 (WTO, 2003). Swaziland currently exports 92 per cent of all its sugar output, and enjoys preferential treatment in the EU through the EU Sugar Protocol (where it has a quota to sell sugar at a price above the world equilibrium price) and the U.S. under a preferential tariff quota¹².

However, despite this preferential access to the EU market via the Sugar Protocol, Swaziland is increasingly becoming vulnerable to the possibility that when market access to the EU for sugar from all Least Developed Countries (LDCs) through the EU Everything-But-Arms Initiative becomes a reality, then its preferential quota might decline, with disastrous consequences for the economy¹³.

The more pressing concern for the Swazi economy revolves around the dumping of heavily subsidized sugar products into SACU. With the option of sourcing cheaper from the EU, South Africa's confectionary markets are depending less on Swaziland, and this has sounded the death knell for the sugar industry¹⁴ (ActionAid, 2002).

3.1.3 Impact of the Cap on the Beef Sub-Sector

With regard to the beef industry, the notable players in this sector are Botswana, Namibia and South Africa.

In Botswana, beef processing accounts for 80 per cent of all agricultural output, and the country enjoys preferential access to the EU via the Beef and Veal Protocol of the CAP, with an annual quota of 18, 916

¹² It is estimated that approximately 50 per cent of all sugar exports are to SACU, 30 per cent to the EU, 3 per cent to the US, and the rest to the world market (WTO, 2003).

¹³ The opening up of the EU sugar market and abolition of all quota-restricted access has a transition period from 2001/2002 to 2008/2009, after which all LDCs will have unrestricted access, albeit at a lower price.

¹⁴ It is reported that by 2001, one sugar mill had been liquidated; another is fearing for its future, and already 16 000 direct jobs in the sugar industry have been shed, together with another 20 000 in related sectors like transport and packaging (ActionAid, 2002).

tonnes, which it has seldom been able to fulfil (WTO, 2003). Namibia also enjoys preferential EU access under the same protocol, with an annual quota of 13, 000 tonnes, which too is not fully utilized. South Africa's beef is excluded from the EU-South Africa Free Trade Agreement.

Traditionally, the EU beef regime has sustained prices at levels well above world market prices, disconnected from market realities and driven by the system of export refunds. A study carried out by the European Research Office found that between 1993-1995, beef exports to South Africa alone increased from 6,600 tonnes to approximately 46,000 tonnes, coinciding with South Africa's decision to replace quantitative restrictions with tariffs, and an increase in the overall allocation for financing export refunds, which facilitated greater volumes of EU beef exports that could be subsidised (FOS, 2001)¹⁵.

Table 11: The Basis of the EU-South Africa Beef Trade

	1993	1994	1995	1996
EU exports to SA (tonnes)	6 660	34 221	45 942	37 605
Average export Refund (R/Kg)	5.5113	5.1119	5.6276	6.7360
Average Recorded FOB Value (R/Kg)	3.77	3.22	3.80	2.75
Total Export Refunds Paid Out (Rm)	37	175	259	253
Total Value FOB Sales (Rm)	25	110	175	100
Ratio of Income Export Refund to FOB Sales	1.46/1	1.59/1	1.48/1	2.53/1

Source: FOS (2001)

EU exports of beef to ACP countries, and Southern Africa in particular, largely consist of low quality beef targeted at the lower end of the market, and this provides direct competition with production by small-scale farmer and emergent commercial farmers, thereby impacting on income and market-oriented development of the sector. The consequences of this are vividly seen in Namibia. Given that EU beef exports to South Africa were mainly of low quality beef, and the complementarities between the South African and Namibian beef sectors, there were adverse effects for Namibia's rural inhabitants, who traditionally depend on cattle farming for their livelihood (FOS, 2001). Over and above the obvious economic impact of increased beef exports from the EU to South Africa, Namibian farmers withdrew their cattle for sale, and this increased the pressure on land and water resources, jeopardizing the long-term sustainability of cattle ranching in Namibia (FOS, 2001).

Even after 1997, when the EU began reducing export subsidies across all sectors, and to the beef sector in particular, it is evident that the fundamental distortion created by these export subsidies has not been addressed—the export refund system is still in place, and the fact that the EU can export beef at artificial prices continuously threatens the beef industry in Southern Africa. The reform of the EU beef sector, which is currently underway, involves a shift from price support to direct aid to farmers, and is estimated

¹⁵ The value of export refunds in the total income obtained from exporting beef to South Africa between 1993 and 1996 rose from 60 per cent to 72 per cent of the total, despite a 28 per cent decline in the value of the Rand by 21 per cent in this period.

to reduce the EU intervention price for beef by 20 per cent between 2001-2003 (FOS, 2001). The implications of this reduction will be a reduction in the price obtained by Southern Africa beef exporters under the beef protocol. While this is still substantially above the world market prices for beef, the returns on beef exports could be much lower by 2008, when the reform process comes to an end.

It must also be kept in mind that the price-reducing effects of the CAP reform have been impacted by the effects of Bovine Spongiform Encephalopathy (BSE), which dramatically lowered prices accruing to EU beef farmers, and in turn necessitated increased buying of EU beef for intervention stocks (FOS, 2001). The implications of this are that by mid-2001, the EU desperately needed to offload one million tonnes of beef. However the current effect is likely to be a further deterioration in EU beef prices and the increased availability of low priced EU meat for export. In addition, beef exports from Southern Africa are likely to face more stringent and costly sanitary and phytosanitary standards on exports to that market (FOS, 2001).

3.1.4 The 2002 U.S. Farm Bill

The U.S. equivalent of the CAP is the Farm Bill, which, while ostensibly tailored to increasing payments to agri-business concerns, is feared to not only encourage overproduction but also shut out developing countries from the U.S. and international markets. The 2002 Farm Bill, which replaces the 1996 “Freedom to Farm” law designed to wean farmers off federal subsidies, will increase U.S. agriculture spending by close to 80 per cent to a total of some \$190 billion over the next 10 years. Not only does the farm bill appear to try boost farm support while conforming to the limits laid out in the WTO Agreement on Agriculture (AoA), but it also increases support to farmers through soil conservation programs (benefiting livestock and fruit farms) that technically fall under the “Green Box” non-actionable subsidies of the WTO Agreement on Agriculture (AoA) (Raghavan, 2003). The Farm Bill guarantees U.S. farmers more stable incomes by increasing price supports for grain and cotton producers, reviving subsidies for honey, mohair and wool, and adding new ones for milk, peanuts, lentils and chickpeas.

According to Beghin et al. (2002), the precursor to the 2002 Farm Bill, the 1996 Farm Bill, increased farm support to most commodities, including export commodities, through a system of:

- **Decoupled payments, or production flexibility contracts** – these subsidized farm activities that had no production requirements. Payments were made on the basis of historical production and land use for contract crops i.e. corn, wheat, rice, cotton, sorghum, barley, oats;
- **Producer price subsidies (marketing assistance) and/or loan deficiency payments** – these are the difference between the market price and the loan rate for program crops, i.e. contract crops, oilseeds, sugar and tobacco; and
- **Counter cyclical emergency payments** – these fall under the market loss assistance program for contract crops and dairy produce.

Beghin et al. (2002) further add that there were small explicit payments for dairy and poultry products, the latter being marginal in terms of WTO notifications. In addition, exports were further subsidized via export credit guarantees to enable foreign countries to purchase U.S. produce.

As SACU and the U.S. negotiate a Free Trade Area, one issue that is increasingly raising concern is the alleged dumping of poultry exports in SACU¹⁶. With U.S. consumer preferences for chicken breasts, the rest of the bird is cheap, and has the potential to destroy SACU poultry markets in much the same way as subsidized EU beef—the chicken industry in South Africa is relatively large, with 11.5 million birds averaging 1.5 kg slaughtered weekly, amounting to 760 tonnes per annum, with a value of R7.5 billion.

3.2 OECD Steel Sector Subsidies

Other notable subsidies that could potentially have an impact on the SACU countries (South Africa in particular) are to be found in the steel sectors of OECD countries. According to Howell et al. (1988), the genesis of intervention by governments in the steel industry can be traced to the first oil crisis, which prompted more or less simultaneous interventions in the steel industry, in the wake of stagnating growth in demand. This led to an enormous surplus in steel making capacity and culminated in subsidization of exports, dumping on international markets, import restrictions and the emergence of national and regional cartels, all of which exerted great influence on world markets.

Instead of rationalizing the steel industry through the closure of non-competitive plants, restraint in expansion activity and retrenchment of employees, the opposite took place—there was a dramatic increase in state intervention in the ensuing years, which tremendously aggravated the problem. Howell et al. (1988) point out that by the mid-1970s, only intervention by governments and the European Commission prevented the largest steel producers in Belgium, France, Italy and the UK from bankruptcy—financial problems faced by the largest steel producers in Belgium, France and Luxembourg led to their gradual takeover by the state, and by the end of the 1970s, over 50 per cent of Europe's steel industry was state-owned. All EC member states gradually resorted to large-scale subsidization of their steel producers, with the end result being annual subsidies in excess of US\$35 billion per annum between 1980-1985.¹⁷

On the other hand, Japan, faced with enormous surplus capacity at the onset of the recession, together with increased competition from new developing country suppliers, opted to insulate the domestic market from import pressure, through a series of joint production cuts aimed at stabilizing and increasing the domestic price of steel, while at the same time exporting surpluses at massively discounted prices.

¹⁶ Chicken a la Bush Sours Talks, *Weekly Mail and Guardian*, 11-18 July 2003.

¹⁷ China approved subsidies to the tune of US\$ 6 billion in 2002, and the EU authorised US\$ 50 billion in 2002, ostensibly to help in the restructuring of the EU steel sector (Washington Post, September 16, 2002).

In the case of developing countries, a deluge of cheap capital in the form of government capital and subsidies, together with concessionary export financing via export-import banks in developed countries and international development institutions meant that there was a significant increase in capacity in countries like Argentina, Brazil, and Mexico. However, vigorous export drives failed as industrialized countries, faced with excess capacity problems of their own, shut out these emergent steel suppliers.

Howell et al. (1988) add that besides subsidies to ailing firms, other market distortions were evident, in the form of export subsidies and incentives, selective devaluations of national currencies and counter-trade transactions. Also evident during the 1980s was the emergence of state sanctioned steel cartels, which administered production quotas and minimum prices, together with joint restraints on production for domestic consumption. Also evident was the imposition of comprehensive import restrictions through pressure applied by domestic producers.

All of this has culminated in a world trading environment where major steel producing countries pursue the joint goals of dominating global steel trade while simultaneously protecting their domestic markets vigorously. Hence for those markets that remain relatively open, there has been a marked influx of cheap steel, especially for those countries that have no steel making capacity of their own.

OECD member states, having realized that these distortions do not bode well for the steel industry, have embarked on measures aimed at restoring normal competitive market conditions, and ultimately strengthening the multilateral trading system (OECD, 2003). Chief among these is tackling the overcapacity problem through the closure of inefficient excess capacity by 2005—amounting to approximately 140 million tonnes, or 13 per cent of current global capacity. There are also moves to regulate subsidies and government support, with the ultimate goal of banning such support.

3.3 WTO Dispute Cases

South Africa (on behalf of SACU) does not have any dispute cases pending before the WTO, either as a complainant or defendant. However, it has made prodigious use of anti-dumping and countervailing measures, initiating 157 anti-dumping investigations and applying 106 anti-dumping measures between 1 January 1995-30 June 2002 (WTO, 2003). By the end of June 2002, there were 98 definitive anti-dumping duties in force, as compared to 35 at the end of June 1996. The bulk of these measures affect chemical products, metal products, glass and glassware, textiles and clothing (Table 12).

Table 12: SACU Countervailing measures 1 July 1998 – 30 June 2002

Country/Product	Initiation	Provisional measure/determination	Final Measure		No Final Measure	
			Definitive Duty	Price Undertaking	No Subsidisation	Other
India						
Footwear	15/09/1999	06/07/2001	N/a	N/a	N/a	N/a
Wire Ropes	22/09/2000	17% 08/02/2002	N/a	N/a	N/a	N/a
Welded galvanised steel pipes	16/03/2001	7.3% 08/02/2002	7.3%	N/a	N/a	N/a
Suspension PVC	24/03/2000	15/12/2000	21.77% 15/06/2001	N/a	N/a	28/06/2002
Acetaminophenol	02/02/1999	NA	24/11/2000	N/a	N/a	29/06/2001
Overhead aluminium steel reinforced conductor cable	30/04/1999	No duty 20/04/2000	N/a	N/a	25/05/2001	N/a
Paper insulated covered electric cable	21/08/1998	No duty 07/05/1999	N/a	N/a	N/a	05/11/1999
Korea, Republic of						
Wire Ropes	22/09/2000	NA	N/a	N/a	N/a	N/a
Pakistan						
Bed Linen	24/03/2000	30/07/2001	N/a	N/a	N/a	N/a

Source: WTO (2003)

4 The Reform of Domestic Subsidies

When South Africa (and by extension, SACU) acceded to the WTO trade negotiations in the early 1990s, the main subsidy instrument in place was the General Export Incentive Scheme (GEIS), designed as an economy-wide package based on value-added and local content, providing considerable incentive to export. GEIS was tailored to assist exporters offset the price disadvantage they faced in international markets, and was implemented through a selective system of liberal tax-free grants. These grants increased through four phases of higher value-added and domestic content, with industries characterized by both high value-added and high local content qualifying for a nominal subsidy of 19.5 per cent of export turnover, while those firms with low value-added and low domestic turnover qualified for only two per cent.

Other incentive schemes in place during this time included inter alia, the tax holiday scheme, accelerated depreciation scheme, export marketing, investment assistance and a small/medium manufacturing development program. The GEIS was formally terminated in mid-1997 and replaced by WTO friendly duty drawbacks and rebates (see Appendix). Also introduced were a host of supply side measures, essentially aimed at enhancing productivity and competitiveness in industry, especially given the gradual reorientation of the economy to natural resource-based beneficiation.

The rationale for reforming subsidies has largely been economic, driven by efforts to make South Africa (and the other SACU members) compliant with the new trade regime as embodied in the WTO. Also of importance is reducing the price-distorting nature of previous subsidies. This frees resources for other important developmental and social needs, such as primary healthcare and social welfare.

With regard to energy, the greatest motivation for reforming the nature of subsidization in this sector revolves around environmental issues, with a shift to cleaner technologies being the greatest motivating factor. As noted in Section 2.3, the price of energy has tended not to include all costs (including external ones), in the pricing of production inputs and the determination of national accounts (Eberhard, 2002). In the past, this omission has had a distorting effect, and in future could potentially have far reaching implications with regard to attaining the goals and objectives of sustainable and equitable growth. It has often been argued that the economic effects of subsidizing energy production have often been far greater than the environmental effect.

These adverse effects arise from government-owned electricity-based monopolies often being a drain on overall government revenue. Moreover, the effect of subsidizing these industries has had the negative effect of diverting resources away from more efficient sectors. The problem is compounded by the fact that subsidies to energy encourage wasteful use (see Pearce and Warford), in particular, if energy prices

fail to reflect the impact of pollution and other externalities. This undermines investment decisions that could favour less polluting technologies¹⁸. Generally, however, the electricity supply industry has supported economic and social development through the reliable supply of low-cost electricity, which has not only enhanced social equity through increased access and subsidized prices, but also through stimulating economic activity in rural areas (Eberhard, 2001).

The case of South Africa is somewhat different from the standard scenario in the sense that Eskom is not really a drain, but in fact generates profits. Its implicit subsidy of tax exemption has also come to end. In other words, there are no obvious incentives to restructure the sector. In addition to the excess generating capacity, which is expected to exist until after 2010, it is difficult to imagine a scenario where cleaner coal technologies or a move to more renewable forms of energy is likely to take off in a significant way. The government, while recognizing that there is a need to display greater commitment to the development of gas and other renewable energy sources, nonetheless acknowledges that coal will be the mainstay of energy supply for at least the next two decades¹⁹. Importance has been attached to the achievement of greater security of energy supply, and this is evident in the increased efforts to explore and tap oil and gas deposits, while at the same time continuing with existing synthetic fuel plants.

In conclusion, it can be argued that South Africa and the other member states that comprise the Southern African Customs Union (SACU) have, since the beginning of the 1990s, made significant strides in eliminating both trade distorting subsidies, not just to conform with the new global trade disciplines under the WTO, but have taken into consideration the fact that a shift towards cleaner production of energy will bode well for a healthier environment, not just for the region but the world as a whole.

¹⁸ See Section 2.3.2

¹⁹ *South Africa will rely on Coal Energy for at least 20 years*. Business Day, 29 July 2003

References

- ACTIONAID (2002). *Farmgate: The Developmental Impact of Agricultural Subsidies*. London: ActionAid
- BEGHIN, J.C., D ROLAD-HOLST and D. van der MENSBRUGGHE (2002). *Global Agricultural Trade and the Doha Round: What are the Implications for North and South?* Working Paper 02-WP 308. Iowa State University Centre for Agricultural and Rural Development
- BLACK, A. (2002). *The Export Success of the Motor Industry Development Programme and its Implications for Trade and Industrial Policy*. Paper presented during the TIPS Annual Forum
- BUSINESS DAY (2003). *South Africa Will Rely on Coal Energy for at Least 20 Years*. Business Day, 29 July
- EBERHARD, A. (2002). Energy Services. In Cassim, R. and W. Jackson (eds). *International Trade in Services and Sustainable Development: The Case of Energy and Tourism in South Africa*. Trade and Industrial Policy Strategies (TIPS) and the International Institute for Sustainable Development IISD
- FLATTERS, F. (2002). *From Import Substitution to Export Promotion: Driving the South African Motor Industry*. Mimeo
- FONDS VOOR ONTWIKKELINGSSAMENWERKING – SOCIALISTISCHE SOLIDARIET (FOS). (2001). *Implications of the Reform of the EU Beef Regime for Southern African Countries. Part 2: The Impact of the EU Beef Regime on Southern Africa – A Review of the Experience and Issues Arising*
- HOWELL, T., W.A. NOELLERT, J.G. KRIER and A. Wm. WOLFF (1988). *Steel and the State: Government Intervention and Steel's Structural Crisis*. Westview Press
- KIRSTEN, J., M. GOUSE, N. TREGURTHA, N.VINK AND J.TSWAI (1999). *Producer Support Estimates (PSE) for South African Agriculture for 1996, 1997 and 1998*. Mimeo
- MAIL AND GUARDIAN (2003). *Chicken à la Bush Sours Talks*. Mail and Guardian, 12-19 July
- OXFAM (2002). *Europe's Double Standards: How the EU Should Reform its Trade Policies with the Developing World*. Briefing Paper #22. Oxford: Oxfam International
- OECD (2003). *Strategies for Resolving Sectoral Industry Problems*. Brussels: Organization for Economic Co-operation and Development
- RAGHAVAN, C. (2002). U.S. Farm Bill Gives One More Blow to New Round. Third World Network. On-line. [Available: <http://www.twinside.org.sg/title/twe280d.htm>]
- REID, K. (1999). *A Critical View of the DCC Scheme*. Department of Trade and Industry Policy Support Programme Working Paper
- STEENKAMP, E. (2000). *South Africa's Experience After the Implementation of the Uruguay Round Agreement on Agriculture*. Pretoria: National Department of Agriculture. Unpublished document
- SUNDAY TIMES (2003). *Survey: Industrial Development Zone*. Sunday Times Business Times, 27 April
- WASHINGTON POST (2002). A Steely Resolve in Paris. Washington Post Editorial, 16 September
- WTO (2003). *Trade Policy Review for the Southern African Customs Union: Report by the Secretariat*. Geneva: World Trade Organization

WTO (1998). *Trade Policy Review for the Republic of South Africa. Report by the Secretariat*. Geneva: World Trade Organization

APPENDIX 1 World Reference Prices Used for Estimating Agricultural Producer Support Estimate (PSE)

Commodity	Reference Price
Maize	U.S. corn No 3 FOB gulf was used as basis for calculating import parity in SA harbour.
Grain Sorghum	The international price used was FOB U.S. Gulf price for Sorghum No2 Yellow based on the South African season (May/April).
Wheat	FOB price for Argentine Trigo Pan wheat was used. Prices provided by SAGIS
Sugar	Average FOB (Durban) export realization price for raw sugar was used. Prices provided by SASA.
Oats	Due to the difficulty in finding an appropriate world price it was decided to use the unit value of imported oats. This data was sourced from the Department Of Trade and Industry
Groundnuts	the international reference price for groundnuts was based on the price for us runners 40/50 – c.i.f. Rotterdam. Johan willemse from agrimark trends provided this data.
Soya Beans	The international price used for Soya beans was the Chicago price for U.S. No 1 Yellow per bushel, multiplied by a factor of 36.7437 to convert it to tons. This price information was taken from the Oilseeds Year Book.
Sunflower Seeds	The Rotterdam CIF prices in us\$/t for sunflower seed was used. Agrimark trends provided this data.
Eggs	Due to limited statistics on world prices of eggs the unit value (FOB) of South African exports of eggs was used as the world reference price. During the last three years South Africa exported considerable volumes of eggs. Source SA trade statistics - Mr E. Steenkamp.
Poultry	Import parity in South African ports for imported U.S. chicken. Import parity prices supplied by Johan Willemse, Agrimark trends.
Milk	OECD approach was used except that NZ and SA fat content are more or less the same. Thus we took the NZ farm gate price and added transport to a South African harbour.
Pork	Import parity in South African harbour of EU pork. Source: Johan Willemse at Agrimark Trends. Based on EU FOB prices.
Sheep meat	Import parity prices in SA harbour. Prices based on imported Class C Australian sheep meat. Import parity figures obtained from Johan Willemse at Agrimark Trends.
Beef and veal	A 40% tariff on imported beef applies here just as in the case of sheep meat. For this calculation one can do two scenarios. One is the average price (or unit value) of low quality meat imports from the EU. (Source: SA trade statistics). Alternatively the import parity of prices of imported British beef landed in a SA port can also be used. The former is a much lower price.
Insurance and freight	The value for insurance on shipments for field crops was based on the FOB value, in all cases assumed to be 0,3%, except in the case of grain sorghum where industry sources indicated it to be 0.7%. Freight Costs were in all cases supplied by SAGIS. For those commodities where no specific freight tariff was available, it was assumed to be the same as the standardized series applicable to wheat, maize and soya beans (this series only applies to the U.S. Gulf Ports-RSA route). Note in the case of wheat, no freight tariff was available for 1997 - in this case an average of the 1996 and 1998 rates was used.

Source: Kirsten et al. (2000)

APPENDIX 2 SACU Trade With Selected Regions

Table A1: SACU Exports to the EU 1997-2002 (current R'000)

HS	1997	1998	1999	2000	2001	2002
C05: Mineral products (25-27)	6,107,225	7,472,403	7,804,060	9,425,809	14,429,625	20,050,461
C14: Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal & articles thereof; imitation jewellery; coin (71)	4,467,470	5,453,852	8,353,388	9,665,487	10,595,811	11,500,389
C16: Machinery & mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image & sound recorders & reproducers, & parts & accessories of such articles (84-85)	2,316,515	3,215,184	4,375,159	6,494,565	10,392,010	12,431,224
C15: Base metals & articles of base metal (72-83)	3,621,194	6,469,580	5,450,975	8,423,711	8,324,865	9,267,625
C17: Vehicles, aircraft, vessels & associated transport equipment (86-89)	1,658,910	2,987,112	6,702,538	7,069,779	7,428,713	8,793,593
C02: Vegetable products (6-14)	2,278,404	2,981,681	3,463,743	3,288,362	3,641,992	4,531,707
C06: Products of the chemical or allied industries (28-38)	1,857,616	1,821,856	2,074,316	2,255,983	2,907,844	4,068,331
C20: Miscellaneous manufactured articles (94-96)	1,775,328	2,123,762	2,291,817	2,297,296	2,713,111	3,936,900
C04: Prepared foodstuffs; beverages, spirits & vinegar; tobacco & manufactured tobacco substitutes (16-24)	1,249,812	1,536,442	1,742,527	2,245,404	2,554,992	3,561,770
C10: Pulp of wood or of other fibrous cellulosic material; waste & scrap of paper or paperboard; paper & paperboard of paper or paperboard; paper & paperboard & articles thereof (47-49)	949,957	1,255,773	1,458,266	2,044,774	2,479,023	2,545,782
C11: Textiles & textile articles (50-63)	1,064,374	1,359,729	1,416,730	1,339,090	1,650,722	2,420,231
C01: Live animals, animal products (1-5)	522,230	830,958	985,428	1,056,499	1,610,594	2,116,668
C07: Plastics & articles thereof; rubber & articles thereof (39-40)	447,583	546,352	671,130	766,538	883,718	1,389,493
C08: Raw hides & skins, leather, furskins & articles thereof; saddlery & harness; travel goods, handbags & similar containers; articles of animal gut (other than silkworm gut) (41-43)	713,883	683,906	546,596	899,895	824,906	664,432
C09: Wood & articles of wood; wood charcoal; cork & articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware & wickerwork (44-46)	218,794	318,454	545,055	545,791	570,517	861,018

SACU exports to the EU, 1997-2002 (cont'd)

HS	1997	1998	1999	2000	2001	2002
C13: Articles of stone, plaster, cement, asbestos, mica or similar materials; ceramic products; glass & glassware (68-70)	235,524	328,141	394,477	414,338	517,459	809,064
C18: Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments & apparatus; clocks & watches; musical instruments; parts & accessories thereof (90-92)	299,258	240,275	225,252	253,620	329,689	459,555
C22: Other unclassified goods (99)	1,858,049	2,297,413	2,927,300	5,850,847	128,317	404
C12: Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops & parts thereof; prepared feathers & articles made therewith; artificial flowers; articles of human hair (64-67)	53,695	52,202	68,631	55,541	61,513	113,564
C21: Works of art, collectors' pieces & antiques (97)	21,313	40,978	65,572	52,586	47,185	89,249
C03: Animal or vegetable fats & oils & their cleavage products; prepared edible fats; animal & vegetable waxes (15)	26,589	25,109	13,940	23,994	34,187	70,213
C19: Arms & ammunition; parts & accessories thereof (93)	-	-	-	1,616	2,744	-
C23: Special classification of original equipment components/parts for motor vehicles (98)	6,120	2,419	13,714	5,078	2,181	41,812
Total	31,749,843	42,043,580	51,590,616	64,476,604	72,131,719	89,723,486

Source: Customs and Excise

Table A2: SACU Exports to the U.S. 1997-2002 (current R'000)

HS	1997	1998	1999	2000	2001	2002
C15: Base metals & articles of base metal (72-83)	2,336,135	3,777,484	3,844,755	5,549,525	4,489,441	5,591,967
C17: Vehicles, aircraft, vessels & associated transport equipment (86-89)	871,028	959,677	989,997	1,721,241	3,551,025	5,408,140
C06: Products of the chemical or allied industries (28-38)	1,869,584	1,578,292	1,698,271	2,691,703	2,484,502	4,269,932
C16: Machinery & mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image & sound recorders & reproducers, & parts & accessories of such articles (84-85)	495,290	714,857	1,350,112	1,813,159	2,593,440	2,754,965
C11: Textiles & textile articles (50-63)	390,007	523,576	696,946	1,043,302	1,577,440	2,075,016
C05: Mineral products (25-27)	750,198	1,767,242	1,702,986	1,777,873	2,623,750	1,745,679
C14: Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal & articles thereof; imitation jewellery; coin (71)	296,593	542,967	706,659	1,848,172	1,400,799	1,411,304
C04: Prepared foodstuffs; beverages, spirits & vinegar; tobacco & manufactured tobacco substitutes (16-24)	404,023	429,379	337,371	672,850	749,854	1,013,408
C02: Vegetable products (6-14)	208,906	319,345	416,929	410,700	463,906	601,544
C07: Plastics & articles thereof; rubber & articles thereof (39-40)	87,636	106,469	163,998	204,406	255,865	364,850
C01: Live animals, animal products (1-5)	65,454	127,360	157,787	160,017	212,411	299,157
C09: Wood & articles of wood; wood charcoal; cork & articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware & wickerwork (44-46)	20,393	29,082	44,286	149,193	134,024	257,515
C20: Miscellaneous manufactured articles (94-96)	59,563	86,154	71,313	91,138	105,952	223,232
C13: Articles of stone, plaster, cement, asbestos, mica or similar materials; ceramic products; glass & glassware (68-70)	91,954	82,252	104,939	155,628	186,369	217,844
C10: Pulp of wood or of other fibrous cellulosic material; waste & scrap of paper or paperboard; paper & paperboard of paper or paperboard; paper & paperboard & articles thereof (47-49)	220,317	252,345	294,202	439,068	197,775	163,861
C18: Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments & apparatus; clocks & watches; musical instruments; parts & accessories thereof (90-92)	26,412	69,236	97,111	68,083	85,611	129,691

SACU Exports to the U.S., 1997-2002 (cont'd)

HS	1997	1998	1999	2000	2001	2002
C21: Works of art, collectors' pieces & antiques (97)	20,888	33,388	43,683	71,323	66,303	98,777
C08: Raw hides & skins, leather, furskins & articles thereof; saddlery & harness; travel goods, handbags & similar containers; articles of animal gut (other than silkworm gut) (41-43)	116,002	84,396	110,342	152,680	240,464	88,043
C12: Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops & parts thereof; prepared feathers & articles made therewith; artificial flowers; articles of human hair (64-67)	12,044	9,461	14,468	11,763	41,808	42,852
C03: Animal or vegetable fats & oils & their cleavage products; prepared edible fats; animal & vegetable waxes (15)	990	1,206	2,941	865	4,457	7,038
C23: Special classification of original equipment components/parts for motor vehicles (98)	-	6	2,021	51	3	233
C19: Arms & ammunition; parts & accessories thereof (93)	-	-	-	6,192	10,633	-
C22: Other unclassified goods (99)	3,467,368	4,923,701	5,493,717	8,346,718	48,054	36
Total	11,810,782	16,417,872	18,344,837	27,385,648	21,523,887	26,765,084

Source: Customs and Excise

Table A3: SACU Imports from the EU 1997-2001 (current R'000)

HS	1997	1998	1999	2000	2001	2002
C16: Machinery & mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image & sound recorders & reproducers, & parts & accessories of such articles (84-85)	22,446,237	29,600,708	23,988,728	27,785,359	30,864,937	37,228,958
C06: Products of the chemical or allied industries (28-38)	7,240,723	8,020,147	8,974,662	10,047,171	11,566,133	14,691,670
C23: Special classification of original equipment components/parts for motor vehicles (98)	3,760,537	4,141,550	6,412,138	6,795,983	10,613,259	14,606,729
C17: Vehicles, aircraft, vessels & associated transport equipment (86-89)	2,783,822	3,534,833	4,315,649	7,021,669	9,676,666	13,598,915
C07: Plastics & articles thereof; rubber & articles thereof (39-40)	2,670,623	2,959,882	3,056,490	3,708,207	4,042,923	5,268,314
C15: Base metals & articles of base metal (72-83)	2,674,813	3,110,004	2,681,756	3,005,011	3,787,336	4,890,552
C14: Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal & articles thereof; imitation jewellery; coin (71)	1,247,513	1,059,383	2,127,952	3,116,201	3,223,557	4,647,016
C18: Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments & apparatus; clocks & watches; musical instruments; parts & accessories thereof (90-92)	2,186,942	2,485,927	2,445,236	2,863,556	3,586,491	4,355,333
C10: Pulp of wood or of other fibrous cellulosic material; waste & scrap of paper or paperboard; paper & paperboard of paper or paperboard; paper & paperboard & articles thereof (47-49)	1,822,897	2,048,581	2,086,183	2,280,273	2,546,230	2,171,772
C11: Textiles & textile articles (50-63)	1,173,015	1,315,508	1,185,626	1,336,213	1,460,819	1,807,259
C13: Articles of stone, plaster, cement, asbestos, mica or similar materials; ceramic products; glass & glassware (68-70)	986,441	1,197,619	1,264,238	1,385,167	1,484,471	1,752,955
C04: Prepared foodstuffs; beverages, spirits & vinegar; tobacco & manufactured tobacco substitutes (16-24)	1,029,105	1,314,679	1,338,771	1,261,164	1,497,057	1,635,582
C20: Miscellaneous manufactured articles (94-96)	611,425	722,330	865,815	897,757	1,083,469	1,259,314
C02: Vegetable products (6-14)	440,345	462,438	448,513	668,467	442,791	788,829
C05: Mineral products (25-27)	1,727,103	692,351	560,847	768,186	1,079,810	778,591
C09: Wood & articles of wood; wood charcoal; cork & articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware & wickerwork (44-46)	265,665	271,869	284,781	366,863	424,022	606,919
C01: Live animals, animal products (1-5)	590,267	392,744	378,792	435,690	377,423	386,907

SACU Imports from the EU, 1997-2002 (cont'd)

HS	1997	1998	1999	2000	2001	2002
C21: Works of art, collectors' pieces & antiques (97)	62,531	42,645	44,425	163,477	70,885	238,605
C12: Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops & parts thereof; prepared feathers & articles made therewith; artificial flowers; articles of human hair (64-67)	136,344	178,523	142,284	151,865	149,564	165,073
C03: Animal or vegetable fats & oils & their cleavage products; prepared edible fats; animal & vegetable waxes (15)	92,568	106,690	108,454	132,737	138,986	159,262
C22: Other unclassified goods (99)	60,721	72,780	57,045	57,517	67,595	117,127
C08: Raw hides & skins, leather, furskins & articles thereof; saddlery & harness; travel goods, handbags & similar containers; articles of animal gut (other than silkworm gut) (41-43)	177,239	208,229	162,292	247,987	221,687	85,507
C19: Arms & ammunition; parts & accessories thereof (93)	-	-	-	809	3,391	-
Total	54,186,877	63,939,419	62,930,674	74,497,330	88,409,502	111,241,190

Source: Customs and Excise

Table A4: SACU Imports from the U.S. 1997-2002 (current R'000)

HS	1997	1998	1999	2000	2001	2002
C15: Base metals & articles of base metal (72-83)	2,336,135	3,777,484	3,844,755	5,549,525	4,489,441	5,591,967
C17: Vehicles, aircraft, vessels & associated transport equipment (86-89)	871,028	959,677	989,997	1,721,241	3,551,025	5,408,140
C06: Products of the chemical or allied industries (28-38)	1,869,584	1,578,292	1,698,271	2,691,703	2,484,502	4,269,932
C16: Machinery & mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image & sound recorders & reproducers, & parts & accessories of such articles (84-85)	495,290	714,857	1,350,112	1,813,159	2,593,440	2,754,965
C11: Textiles & textile articles (50-63)	390,007	523,576	696,946	1,043,302	1,577,440	2,075,016
C05: Mineral products (25-27)	750,198	1,767,242	1,702,986	1,777,873	2,623,750	1,745,679
C14: Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal & articles thereof; imitation jewellery; coin (71)	296,593	542,967	706,659	1,848,172	1,400,799	1,411,304
C04: Prepared foodstuffs; beverages, spirits & vinegar; tobacco & manufactured tobacco substitutes (16-24)	404,023	429,379	337,371	672,850	749,854	1,013,408
C02: Vegetable products (6-14)	208,906	319,345	416,929	410,700	463,906	601,544
C07: Plastics & articles thereof; rubber & articles thereof (39-40)	87,636	106,469	163,998	204,406	255,865	364,850
C01: Live animals, animal products (1-5)	65,454	127,360	157,787	160,017	212,411	299,157
C09: Wood & articles of wood; wood charcoal; cork & articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware & wickerwork (44-46)	20,393	29,082	44,286	149,193	134,024	257,515
C20: Miscellaneous manufactured articles (94-96)	59,563	86,154	71,313	91,138	105,952	223,232
C13: Articles of stone, plaster, cement, asbestos, mica or similar materials; ceramic products; glass & glassware (68-70)	91,954	82,252	104,939	155,628	186,369	217,844
C10: Pulp of wood or of other fibrous cellulosic material; waste & scrap of paper or paperboard; paper & paperboard of paper or paperboard; paper & paperboard & articles thereof (47-49)	220,317	252,345	294,202	439,068	197,775	163,861
C18: Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments & apparatus; clocks & watches; musical instruments; parts & accessories thereof (90-92)	26,412	69,236	97,111	68,083	85,611	129,691

SACU Imports from the U.S., 1997-2002 (cont'd)

HS	1997	1998	1999	2000	2001	2002
C21: Works of art, collectors' pieces & antiques (97)	20,888	33,388	43,683	71,323	66,303	98,777
C08: Raw hides & skins, leather, furskins & articles thereof; saddlery & harness; travel goods, handbags & similar containers; articles of animal gut (other than silkworm gut) (41-43)	116,002	84,396	110,342	152,680	240,464	88,043
C12: Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops & parts thereof; prepared feathers & articles made therewith; artificial flowers; articles of human hair (64-67)	12,044	9,461	14,468	11,763	41,808	42,852
C03: Animal or vegetable fats & oils & their cleavage products; prepared edible fats; animal & vegetable waxes (15)	990	1,206	2,941	865	4,457	7,038
C23: Special classification of original equipment components/parts for motor vehicles (98)	-	6	2,021	51	3	233
C19: Arms & ammunition; parts & accessories thereof (93)	-	-	-	6,192	10,633	-
C22: Other unclassified goods (99)	3,467,368	4,923,701	5,493,717	8,346,718	48,054	36
Total	11,810,782	16,417,872	18,344,837	27,385,648	21,523,887	26,765,084

Source: Customs and Excise

APPENDIX 3 SACU Incentive/Subsidy Schemes As At March 2003 (Alphabetically Arranged)

NAME OF SCHEME	DESCRIPTION	OBJECTIVE	ACCESS CRITERIA	RESPONSIBLE INSTITUTION	WTO COMPLIANT (Y/N)
REPUBLIC OF SOUTH AFRICA					
AGRO INDUSTRIES DEVELOPMENT FINANCE	Medium-term finance via loans, suspensive sales, equity and quasi-equity for: -Permanent infrastructure establishment -Establishment of new undertakings or expansion of existing ones	Development and expansion of agricultural, food & beverage and marine sectors	An economically viable business plan and a minimum financing requirement of R1m	Industrial Development Corporation (IDC)	Yes
BRIDGING FINANCE SCHEME	Short-term loans (max 18 months) with competitive risk related interest rates linked to the prime overdraft rate	To address short-term needs of entrepreneurs who have secured firm contracts (excluding construction) with Govt and/or private sector	-Recipients of Govt tenders -Entrepreneurs who have secured contracts for product or service provision to established big blue chip companies -Entrepreneurs with annual turnover > R1m -Minimum financing requirement of R500 000	IDC	Yes
CAPACITY BUILDING SUPPORT FOR RETAIL FINANCE INTERMEDIARIES (RFIs)	Support structured around the capacity needs of RFIs, with grants ranging from R10 000-R500 000	To provide capacity building support to new RFIs to initiate new loan portfolios, and assist existing RFIs to expand loan portfolios	-Clearly defined SMME target markets; -Sound accounting and financial systems; -Sound internal organizational guidelines, policies and procedures; and -Capacity to undertake current and proposed projects.	Khula EnterpriseFinance	Yes

SACU Subsidy and Incentive Schemes as at March 2003 (cont'd)

NAME OF SCHEME	DESCRIPTION	OBJECTIVE	ACCESS CRITERIA	RESPONSIBLE INSTITUTION	WTO COMPLIANT (Y/N)
COMPETITIVENESS FUND	Supports the introduction of technical and marketing expertise to firms, and insists on a 50% contribution by the firm, with grants being paid on a reimbursement basis	Cost sharing grant scheme run by the DTI, with funds sourced from the World Bank, in order to provide financial support for improving the competitiveness of private sector South African firms	-Available to South African private firms of all sizes; -Funds allocated on first-come first served basis; -Firms to submit a realistic plan for the development of business activities	Department of Trade and Industry	Yes
BUMBLE BEE PROGRAMME		Sub-component of the Competitiveness Fund, providing free consulting services to micro-manufacturers with less than 20 employees		Trade Development Institute (TDI)	Yes
CRITICAL INFRASTRUCTURE PROGRAMME	Critical infrastructure provision	Supplementing the infrastructure provided by existing public sector/private sector providers by funding a top-up grant of between 10% and 30% of actual costs	Available to local authorities or the private sector in partnership between the two parties	DTI	Yes
DANIDA BUSINESS TO BUSINESS PROGRAMME	-Covers expenses connected with management, business skills and technology transfer from Danish to South African firms; -Provides access to finance for South African company; - 100% Khula Guarantee to financial institution for loans exclusively for procurement of shares, machinery and capital equipment	To develop and strengthen business opportunities and create jobs for eligible entrepreneurs from historically disadvantaged backgrounds	-Commercially viable businesses, for development, based on formation of business partnerships between South African and Danish companies -Long term objective for private partners to continue partnership on termination of support	Khula Enterprise Finance	Yes

NAME OF SCHEME	DESCRIPTION	OBJECTIVE	ACCESS CRITERIA	RESPONSIBLE INSTITUTION	WTO COMPLIANT (Y/N)
DUTY CREDIT CERTIFICATE SCHEME	Temporary kick-start measure to enhance export competitiveness by offering duty credit certificates to exporters of textiles and clothing	Improvement of export awareness, productivity and training, with the aim of achieving international competitiveness	Exporters of certain prescribed textile and clothing products	DTI	No. to be phased out 1 January 2005
EMERGING ENTREPRENEUR SCHEME	-To enable entrepreneurs access funding from their bankers for the establishment, expansion or acquisition of new or existing businesses; and -Maximum indemnity of 60-70% and maximum facility of R75 000	To increase access to finance for SMMEs through banks	-Independently owned SMMEs with assets of less than R2m before financing -SMMEs to meet the normal lending criteria of the banks	Khula Finance	Yes
EMPOWERMENT FINANCE	Medium-term finance via loans, equity and quasi-equity for: -Management buy-ins, buy-outs or leverage buy-outs; and -Strategic equity partnerships Cost of funding based on the risk level attached to each transaction	To provide assistance to emerging industrialists/entrepreneurs to acquire a stake in formal business	Emerging entrepreneurs in small to medium-sized ventures who comply with the following -Business to be acquired as a going concern; -Business to have economic merit; -Entrepreneur to have a meaningful management role; -Deals to be between R5m-R100m; and -Minimum cash contribution of 10% purchase price from entrepreneur	IDC	Yes

NAME OF SCHEME	DESCRIPTION	OBJECTIVE	ACCESS CRITERIA	RESPONSIBLE INSTITUTION	WTO COMPLIANT (Y/N)
ENTREPRENEURIAL MINING AND BENEFICIATION FINANCE	Medium-term finance via loans, suspensive sales, equity and quasi equity to: -Establish or expand junior mining houses; -Assist historically disadvantaged persons (HDPs) to acquire mining assets; -Undertake mining related activities, e.g. contract mining; and -Establish or expand jewellery-manufacturing activities. Interest rates competitive, risk related and based on the prime overdraft rate	The development of small and medium-sized mining and beneficiation activities and the manufacture of jewellery	-An economically viable business plan; -Minimum financing requirement of R1m	IDC	Yes
EQUITY FUND	Assists SMMEs wishing to expand their activities to enter into joint ventures, re-capitalize companies and also buy out existing shareholders	To fund joint ventures, re-capitalize companies and also buy out existing shareholders	-SMMEs to have a net asset value of not less than R500 000; -Demonstration by applicants of medium to long-term viability; and -Anticipation of an adequate rate of return	Khula Finance	Yes
EXPORT FINANCE	-Credit facilitation for capital goods and services exported from South Africa -Payment terms at market related rates for facilities denominated in US\$ or ZAR	To assist in the promotion of exports of capital goods and services by providing competitive US\$ and ZAR financing to prospective foreign buyers of equipment	All industrialists/exporters	IDC	Yes

NAME OF SCHEME	DESCRIPTION	OBJECTIVE	ACCESS CRITERIA	RESPONSIBLE INSTITUTION	WTO COMPLIANT (Y/N)
EXPORT MARKETING AND ASSISTANCE SCHEME (EMIA)	Consists of four parts, namely Primary Market Research, Outward Selling Trade Missions, Inward Buying Trade Missions, Exhibition Assistance	To assist exporters with primary export market research, trade missions and exhibitions (and shortly, inward and outward investment missions	All exporters, but special terms for SMMEs	EMIA	Yes
GENERAL SUPPORT ESTIMATE (GSSE)	R&D in the Agricultural sector Training of farmers Inspection services Infrastructure maintenance Marketing and promotion Public stockholding	To provide general support services to the Agricultural Sector	Large and small scale farmers in the Agricultural sector	NDA, Provincial Agricultural Departments	Yes
MANUFACTURING SECTOR EXPANSION FINANCE	-Medium-term finance via loans, suspensive sales, equity and quasi-equity or creation of new or additional production capacity -Interest rates are competitive, risk related and based on prime bank overdraft rate	Development and expansion of the manufacturing sector through the provision of finance for the creation of new or additional capacity	-Economically viable business plan; -Meaningful financial contribution of at least 33% by the promoters (10-20% for HDPs)	IDC	Yes
FINANCE FOR TEXTILES, CLOTHING, LEATHER & FOOTWEAR INDUSTRIES	-Medium-term finance via loans, suspensive sales, equity and quasi-equity -Interest rates are competitive, risk related and based on prime bank overdraft rate	Development and expansion of these sectors by provision of finance for: -Creation of new and existing capacity; -Setting up of distribution channels; -Working capital, pre and post-shipment trade finance for exports	-Economically viable business plan; -Meaningful financial contribution of at least 35-50% (depending on the business) by the promoters (10-20% for HDPs); and -Minimum financing requirement of R500 000	IDC	Yes

NAME OF SCHEME	DESCRIPTION	OBJECTIVE	ACCESS CRITERIA	RESPONSIBLE INSTITUTION	WTO COMPLIANT (Y/N)
FOREIGN INVESTMENT GRANT	Grant to overseas companies investing in new machinery and equipment to establish projects in South Africa	Promotion of foreign investment	Available to foreign investors with a foreign shareholding of a minimum of 50%	DTI	Yes
KHULA START	Group lending scheme for lower end of micro-enterprise market, targeting historically disadvantaged communities, women, rural areas and informal sector; -To be initiated through existing NGOs or CBOs who apply to become Micro-Credit Outlets (MCOs)	Promotion of greater access to micro-credit in rural areas	Existing NGO/CBO in rural areas involved in SMME activities such as business training and advise	Khula Finance	Yes
IMPORT FINANCE	Credit and guarantee facilities denominated in US\$ and other foreign currencies to local industrialists for the medium to long-term financing of imported capital goods and services	Provision of medium to long-dated import credit facilities to local importers of capital goods	All industrialists/importers	IDC	Yes
INDUSTRIAL DEVELOPMENT ZONES (IDZs)	Quality infrastructure, expedited customs procedures and duty-free operating environments	To encourage international competitiveness of the South African based manufacturing sector	All industries (however, zones have to be designated first)	DTI	Yes
MOTOR INDUSTRY DEVELOPMENT PROGRAMME (MIDP)	Enables local vehicle and component manufacturers increase production runs and encourages rationalization of model ranges; -Encourages exports and complements imports of vehicles and components	To increase competitiveness and productivity	Motor vehicle assemblers and component manufacturers and exporters	DTI	Yes/No

NAME OF SCHEME	DESCRIPTION	OBJECTIVE	ACCESS CRITERIA	RESPONSIBLE INSTITUTION	WTO COMPLIANT (Y/N)
PRODUCER SUPPORT ESTIMATE (PSE)	-Market price support (producer and consumer prices) Direct payments to producers Lowering of producer input costs Lowering of overall costs in the agricultural sector Sub-national measures and tax concessions	Promotion of agricultural production	Large and small scale farmers in the Agricultural sector	NDA, Provincial Agricultural Departments	No
REBATE PROVISIONS	Provides rebates and drawbacks of certain duties applicable to imported goods, raw material and components used in manufacturing, processing or for export	Promotion of manufacturing and export of goods	All manufacturing industries	DTI/Board on Tariffs and Trade (BTI)	Yes
SECTOR PARTNERSHIP FUND (SPF)	-Available to groups of five or more firms to prepare and execute marketing and production related projects with the aim of improving competitiveness and productivity -Fund covers 65% of projects up to a maximum of R1.5m	Promotion of collaborative projects that enhance productivity and competitiveness of manufacturing and agro-processing firms/industries	Any partnership of five or more organizations within local manufacturing or agro-processing industry that puts forward a qualifying project	DTI	Yes

NAME OF SCHEME	DESCRIPTION	OBJECTIVE	ACCESS CRITERIA	RESPONSIBLE INSTITUTION	WTO COMPLIANT (Y/N)
SEED LOANS FOR RETAIL FINANCIAL INTERMEDIARIES (RFIs)	Amounts range from R50 000-R20m, and loans are converted to grants once mutually agreed upon performance criteria are met	Provision of initial capital to new organizations to initiate portfolios, and to fund operational expenses over a predetermined period	RFIs must be legally constituted and have: -Clearly defined SMME target markets; -Sound accounting and financial systems; -Sound internal organizational guidelines, policies and procedures; -Capacity to undertake current and proposed projects; and -Clear and achievable short and medium term objectives; and -Matching grants of at least 15% of envisaged operating expenses.	Khula Finance	Yes
SKILLS SUPPORT PROGRAMME (SSP)	-Cash grant for skills development to enable investors and large expansions to prepare their workforce -50% of training costs are subsidised, with a ceiling of 30% of actual costs	To encourage: -Greater investment in training; -Improvement of industrial training systems; -Creation of opportunities for introduction of new advanced skills; and -Facilitation of new employment	All local and foreign firms for training grants under the Skills Support	DTI	Yes

NAME OF SCHEME	DESCRIPTION	OBJECTIVE	ACCESS CRITERIA	RESPONSIBLE INSTITUTION	WTO COMPLIANT (Y/N)
SMALL AND MEDIUM ENTERPRISE DEVELOPMENT PROGRAMME (SMEDP)	<p>Incentive package providing for a 2-year investment grant on approved qualifying assets calculated as follows:</p> <ul style="list-style-type: none"> -First R5m investment: 10% p.a. -Next R10m investment: 6% p.a. -Next R15m investment: 4% p.a. -Next R20m investment: 3% p.a. -Next R25m investment: 2% p.a. -Next R25m investment: 1% p.a. <p>Additional investment payable in 3rd year based on the ratio of Human Resource remuneration expressed in terms of manufacturing cost, must be a minimum of 30%</p> <p>Tax exempted in terms of Act 10 (zH) of Income Tax Act No.58 of 1982, as amended</p>	<ul style="list-style-type: none"> -Creation of wealth; -Generation of employment; -Development of entrepreneurship; -Utilisation of raw materials; -Ensuring long-run sustainability of projects receiving incentives; and -Reduction of investment loss for small and medium investors 	<p>Available countrywide to all local and foreign firms investing not more than R100m in land, buildings, plant and equipment in new projects or expansion of existing projects;</p> <ul style="list-style-type: none"> -Legal entities and sole proprietors and partnerships (excluding trusts) involved in manufacturing, high-value agriculture projects and agro-processing, aqua culture, bio-technology, tourism, information and communication technology investments, recycling, culture industries and business services 	<p>The Enterprise Organization (TEO) of the DTI</p>	<p>Yes</p>
STANDARD CREDIT GUARANTEE SCHEME	<p>Enables entrepreneurs to access funding from their bankers for the establishment, expansion or acquisition of new and existing business;</p> <ul style="list-style-type: none"> -Maximum indemnity is 60-70% and the maximum facility is R600 000 	<p>To increase access to finance for SMMEs through banks</p>	<ul style="list-style-type: none"> -All independently owned SMMEs with assets of less than R2m before financing; -SMMEs to meet the normal bank lending criteria 	<p>Khula Enterprise Finance</p>	<p>Yes</p>

NAME OF SCHEME	DESCRIPTION	OBJECTIVE	ACCESS CRITERIA	RESPONSIBLE INSTITUTION	WTO COMPLIANT (Y/N)
STRATEGIC INDUSTRIAL PROJECTS PROGRAMME (SIPPP)	System of tax allowances and incentives aimed at lowering the cost of foreign and local investment in crucial industrial sectors	Increasing private sector investment in profitable and innovative economic sectors, together with job creation	<ul style="list-style-type: none"> -All manufacturing sectors excluding tobacco and related sectors -All computer and computer related activities, excluding secretarial services -All R&D activities in engineering and natural sciences 	DTI	Yes
SUPPORT PROGRAMME FOR INDUSTRIAL INNOVATION (SPII)	Support of innovative products or process development via a grant of 50% of all costs incurred in development activities; <ul style="list-style-type: none"> -Matching scheme supports product/process development to a maximum of grant amount of R1.5m per project; -Partnership Scheme supports large-scale innovation and product/process development via a conditional grant with no upper limit, repayable by a levy on sales if the project is successfully commercialized 	Support for South Africa based products or process development that represents a significant technological advance, and has a commercial advantage over existing products, with a potential to be successfully marketed	All private sector entrepreneurs, on submission of a project proposal assessed on the following: <ul style="list-style-type: none"> -Management's ability of product or process development; -Financial ability to successfully complete the proposed development and commercialisation; and -Ability to manufacture and market products or implement a process 	IDC	Yes

NAME OF SCHEME	DESCRIPTION	OBJECTIVE	ACCESS CRITERIA	RESPONSIBLE INSTITUTION	WTO COMPLIANT (Y/N)
TECHNO-INDUSTRY DEVELOPMENT FINANCE	Equity and equity related loan finance for: -Techno businesses that are expanding; -New techno ventures with proven technology and strong local or foreign partners; and -Takeovers, management buy-ins and buy-outs	Development and expansion of technology-intensive business in the IT, telecom, electrical and electronic industries	Economically viable business plan and a minimum financing requirement of R1m	IDC	Yes
TECHNOLOGY AND HUMAN RESOURCES FOR INDUSTRY PROGRAMME (THRIP)	-Contributions from Govt and Industry to finance research efforts of academic partners that involve students. -Criteria is R1 from govt for every R2 from industry, and in certain cases R1 for R1	-Enhancing competitiveness of South African industry through the development of skilled personnel and technology -Encouraging long-term strategic partnerships between industry, research and educational institutions and government	Research groups in the natural sciences, engineering and technology within educational institutions can participate in collaboration with any private company or consortium of companies	National Research Foundation (NRF) on behalf of DTI	Yes
TECHNOLOGY TRANSFER GUARANTEE FUND (TTGF)	Guarantees 90% of technology transfer transaction expenses, to a maximum of R1m -5-year maximum term for guarantee -Khula levies a standard indemnity fee of 3% p.a. on the facility guaranteed payable annually in advance	To provide loan guarantees for SMMEs for the sole purpose of acquiring manufacturing technology, which could be from within or outside South Africa	SMMEs with an approval certificate from the CSIR for a technology evaluation on the proposed technology to be transferred before applying to a financial institution for a TTGF guarantee	Khula Enterprise Finance	Yes

NAME OF SCHEME	DESCRIPTION	OBJECTIVE	ACCESS CRITERIA	RESPONSIBLE INSTITUTION	WTO COMPLIANT (Y/N)
TOURISM DEVELOPMENT FINANCE	-Medium-term finance via loans, suspensive sales, equity and quasi-equity, for the creation of new or upgrading/renovation of existing tourist facilities such as hotels, conference or convention centres -Interest rates are competitive, risk related and based on the prime bank overdraft rate	Development and expansion of the tourism industry by providing finance for commercial projects in the medium to large sectors of the tourism industry	Economically viable business plan and a minimum financing requirement of R1m	IDC	Yes
WHOLESALE FINANCE	-Maximum 6-year medium-term loan -Interest rates are competitive, risk related and based on the prime bank overdraft rate	Wholesale funding to intermediaries for onward lending to individual entrepreneurs	Franchises and applicants must have: -A good business development record; -A strong financial position; -Developed/acquired a strong training and mentorship programme; -Require financing for onward lending to at least 10 projects (at least 60% HDPs)	IDC	Yes
WORK PLACE CHALLENGE	To enhance co-operation between workers and management to boost South Africa's competitiveness and employment creation by improving industrial performance and productivity	To improve South Africa's competitiveness and employment creation	South African firms of all sizes	DTI	Yes

NAME OF SCHEME	DESCRIPTION	OBJECTIVE	ACCESS CRITERIA	RESPONSIBLE INSTITUTION	WTO COMPLIANT (Y/N)
REPUBLIC OF BOTSWANA					
BOTSWANA TECHNOLOGY CENTRE	Industrial and Scientific Development through Research and Technology Innovation	Provision of policy guidelines for establishment of a new Science and Technology Research Development System; advisory function for co-ordination between Operational Research Fund, Education Research Fund and other funds			
CONCESSIONARY LOANS FOR ENTREPRENEURIAL SKILLS DEVELOPMENT	Enhance economic empowerment of Botswana citizens	Training, mentoring, monitoring and concessionary loans	5% interest on loans up between P500-P150 000; 7.5% interest on loans between P150 000 – P2 million	Citizen Entrepreneurship Development Agency (CEDA)	Yes
DUTY CREDIT CERTIFICATION SCHEME	AS FOR SOUTH AFRICA		Firms must have exported for at least one year	Ministry of Trade and Industry	Yes
EXPORT CREDIT INSURANCE AND GUARANTEE	AS FOR SOUTH AFRICA		All goods and services	Botswana Export Credit Insurance Company (BECI)	Yes
MORTGAGE EQUITY FUND	Empowering of citizen investors in the property market	Equity finance to eligible citizens or citizen owned property companies threatened by foreclosure	Fund purchases shares in qualifying companies, for future disposal	Citizen Entrepreneurship Mortgage Assistance Equity Fund (CEMEAF)	Yes
SMME SCHEME	Micro-credit and credit guarantee scheme	Partial credit guarantees up to 60% of bank loans from P10 000 to P250 000	All business activities except those with >10 employees	Ministry of Trade and Industry	Yes

NAME OF SCHEME	DESCRIPTION	OBJECTIVE	ACCESS CRITERIA	RESPONSIBLE INSTITUTION	WTO COMPLIANT (Y/N)
RURAL INDUSTRIAL PROMOTION	Industrial development and employment in rural areas	Achievement of self-sufficiency in technological development	All private sector firms	RIPCO	Yes
KINGDOM OF LESOTHO					
NEW EXPORT FINANCE AND INSURANCE SCHEME	Insurance against commercial and political risk, over and above export fiancé	Simplification of export guarantee granting procedures; loans guaranteed up to 50% of value, with a collateral of 50% of loan value	Large, medium and small-scale exporters,	Central Bank of Lesotho	Yes
REPUBLIC OF NAMIBIA					
LINES OF CREDIT/LOANS	Promotion of manufacturing value-added	90% of contract price, with interest rate of 14%, repayable in seven equal instalments after a 20 month grace period		Offshore Development Company (ODC)	Yes
DUTY CREDIT CERTIFICATION SCHEME	As for Republic of South Africa			Export Promotion Subdivision, Ministry of Trade and Industry	Yes
EXPORT PROCESSING ZONES	Encouragement of export-led industrialisation and transfer of skills and technology	Conformity with Export Processing Zone Act (1995)	All firms, excluding meat and fish processing concerns	ODC and Namibian Investment Centre	Yes

NAME OF SCHEME	DESCRIPTION	OBJECTIVE	ACCESS CRITERIA	RESPONSIBLE INSTITUTION	WTO COMPLIANT (Y/N)
SMALL BUSINESS CREDIT GUARANTEE TRUST	Provision of credit to small and medium enterprises	Guarantee of 80% of loans from participating financial institutions, up to a ceiling of N\$250 000	All small and medium enterprises	Joint Venture between Government of Namibia, Namibia Development Corporation and five commercial banks	Yes
SPECIAL INDUSTRIALISATION PROGRAMME	Promotion of certain manufacturing activities, e.g.	Equity participation, infrastructure provision, support for joint ventures or preference for local manufacturers	Firms involved in food processing, leather products, textiles and clothing, wood and paper products and automotive components	Government of Namibia	Yes
KINGDOM OF SWAZILAND					
SMALL SCALE EXPORT CREDIT GUARANTEE SCHEME (ECGS)	Credit guarantees for loans to small and medium enterprises	Improvement of export performance of qualifying firms; 75% guarantee on pre-shipment and 85% of post-shipment loans	Firms must be registered in Swaziland; submit viable project proposals, and business plans; provision of security or collateral and proof of export orders		

Source: WTO (2003)