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POTENTIAL FOR DIVERSIFYING NAMIBIA S NON-MINERAL EXPORTS TO NON-TRADITIONAL MARKETS

by

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## ABSTRACT

In recognition of the risk posed by large and widespread price declines in world markets for primary commodities, Namibia (like other countries in the same situation) has no other option(s), but to embrace the concept of export diversification. This is therefore a supplement to the existing efforts by various entities to identify existing and potential markets for non-mineral products for which Namibia has comparative advantage in exporting. Efforts have also been made to identify non-mineral products to target in the immediate future. Thus, the approach adopted in this paper has two fronts, viz, the market front and the product front. Several techniques are employed to determine the comparative advantage of selected products and the import structures (and/or trade correspondence) of various sample markets are examined.

The sample markets selected go beyond regional-trading bloc, mainly due to the emerging consensus that regional trading per se should not take precedence over global-market trading. Besides, the import potential of countries in a given region, particularly in developing countries are, generally, too small; and usually have similar factor endowment and climatic conditions which cause their production and therefore their export patterns to be too similar and with only limited complementarities. The results suggested that there is a great potential to export sample commodities to various markets world-wide, with USA and European markets showed the strongest commodity correspondence of imports for most commodities. The study could, however, not include a desired number of sample commodities due to lack of data.

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## 1. INTRODUCTION

Many developing countries with abundant natural resources in sub-Saharan Africa and other regions rely heavily on exports of primary commodities for their foreign exchange earnings. International prices for primary commodities, however, tend to be highly variable, creating considerable uncertainty about these countries earnings from one year to the next. This uncertainty has rekindled interest in national policies and possible multilateral initiatives to increase export diversification in commodity-dependent developing countries as a means of improving their external positions and, more generally, their overall economic performance and welfare (DeRosa, 1992).

Namibia is fairly an open economy particularly from trading perspective, and this has been so before and after independence. However, this openness also meant higher foreign competition for most sectors of the economy. This state of affair kept Namibia holding at its traditional economic pillars - trading in primary goods, particularly minerals, live animals, fish and meat. Mineral exports, primarily gem diamonds and uranium, which constitutes the core around which development has revolved, account for about 50 percent of total exports. This renders the country vulnerable to fluctuations in international prices and other sources of external shocks. In addition, the activities of primary products are susceptible to weather conditions (e.g. drought, unfavorable water conditions at sea, etc.). The aforementioned traditional export commodities have been virtually the same i.e. not diversified for decades, and so are their export markets. Thus, Namibia's export markets remained Europe and South Africa which collectively accounting about 70 percent of the country's export share. This market concentration has been blamed, in part, for the country s misfortune; price declines of products concerned, recessions and other shocks that arise especially from developed countries.

To cope with the negative price shock of minerals and of other primary commodities from year to year, the government embarked upon the programme to diversify Namibia's export base away from mineral and increase non-mineral foreign earnings. This policy strategy emphasizes and encourages export of value added and has been highly commanded by renowned international economic institutions. It appears that there is a reasonable scope for doing so, as most of minerals and agricultural products are presently exported in unprocessed form. The government has already put in place a number of policy reforms and incentives to encourage the production and export of non-mineral tradeables and has been working on broadening Namibia's export market. These efforts seem to be yielding some positive results, as there have been noticeable improvements in the growth of non-mineral exports.

However, much still need to be done, particularly to identify the new non-mineral products to supplement the existing ones and to find the market(s) for these products. Therefore, the main objective of this study is to identify existing and potential markets for non-mineral products for which Namibia has comparative advantage in exporting. This would minimize the effects from recessions and other shocks, which are usually fully transmitted to Namibia from the current-few-export markets. To achieve this, it became imperative to also identify non-mineral products to target in the immediate future. Some policy recommendations are suggested, based on the findings of the study.

The rest of the study is arranged as follows. Section 2 gives the main highlights on Namibia's export sector. Section 3 reviews relevant theoretical literature. Section 4 highlight issues of the methodology adopted in this study, while section 5 present the results and their analysis. The last section consists of the conclusion and policy recommendations.

# 2. A BRIEF REVIEW OF NAMIBIA S EXPORT SECTOR

## 2.1 EXPORT COMMODITY COMPOSITION

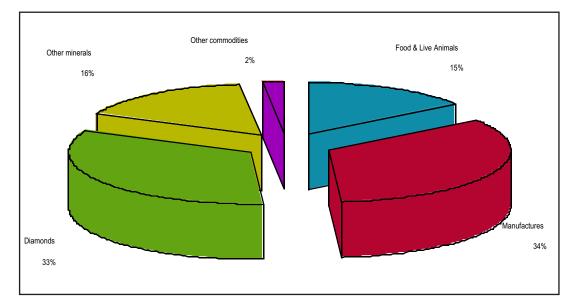
Mineral exports, primarily gem diamonds, uranium and base metals have traditionally been the core of the country s exports, accounting for close to 50 percent of total exports. Weak prices of base metals (particularly, copper, silver, and lead) and the subsequent closure of Tsumeb mine (the main producer of base metals in Namibia), the fall in demand for the international market for diamonds as well as the economic crisis of South-East Asia, has caused a dramatic decline in the contribution of exports to GDP during the period 1994-1997. However, these were counteracted by the improvement in the non-mineral exports during this period. Overall non-mineral exports constitute about 43 percent of total exports, on average, between 1990 -2000, but still lower than mineral exports' (which, constituted about 57 percent of total exports) as shown in table2.1 (reinforced by chart 2.1).

Table 2.1	Trends in Export performance as percentage of GDP
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	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Exports/											
GDP ratio	49.5	45.7	44.6	47.3	42.7	42.4	44.0	41.0	43.3	50.2	61.0
Mineral Exports/ GDP	28.8	28.3	25.2	26.7	21.3	21.7	24.7	24.3	21.2	28.4	36.7
Non-mineral Exports /GD	P15.7	17.4	19.4	20.6	21.4	20.7	19.3	16.7	22.1	21.8	24.3
Minerals as percent of total Exports	64.7	61.8	56.4	56.5	49.9	51.1	56.1	59.2	48.7	56.6	60.2
Non-minerals as percent of Total Exports	35.3	38.2	43.6	43.5	50.1	48.9	43.9	40.8	51.3	43.4	39.8

Source: Bank of Namibia (Various Annual reports)

Manufactured products exports of which processed fish and fish products make up between 86 percent and 92 percent are second to mineral products. This reflects the fact that the manufacturing industry in Namibia is not diversified, posing the industry very susceptible to both supply and demand shocks.



#### Chart 2.1 Export Share by Type of Product, 1999

Source: Bank of Namibia (1999)

Nevertheless, the overall performance of the non-mineral export sector is impressive enough to encourage targeted incentives and diversification measures that will boost processed and semi-processed exports (Ikhide, 1999). For example, traditional exports of food and live animals together with manufacturing exports rose from 35.5 percent in 1990 to 51.3 percent in 1998. During this period, the exports of these products together have outperformed mineral exports in 1994 and 1998.

The non-mineral exports consist of three sectors, viz. the fishing industry, agriculture and the manufacturing industry. A great variety of non-mineral products are presently exported from Namibia. Table 2.2, below presents in summary form a list of some of these non-mineral exports by sector and sub-sector.

Exports for most of these products have just been launched recently — suggesting that Namibia has a greatuntapped potential in the development of different types of non-mineral exports. In this regard, horticulture is a growing industry with a great potential for export. Cotton and tobacco are also crops of great importance for export and for the future development of Namibia s agro-economy. Both crops are rain-fed, labor intensive and can be a principal means for the diversification of subsistence farming in the northern communal areas (Barden, 1998).

Sector	Sub-sector	Products
1. Fish	(a) On—shore fish processing	Pilchard canneries, fishmeal, white fish, tuna canneries, rock Lobster, seaweed, horse
mackerel		
	(b) Seal industry	Drying skins, oil and meat
	(c) Other marine products	Salt, oysters, crab, lobster seaweed and guano.
2. Agriculture	(a) Meat and meat products	Beef, sheep and goat
	(b) Karakul industry	Karakul pelts
	(c) Horticulture	Grapes, melons, dates, asparagus
	(d) Cotton and tobacco	-
	(e) Ostrich	Adult birds, chicks, eggs, skins, processed meat.
3. Manufactured and crafts	(a) Hide & skin and leather	-
	(b) Beer and soft drinks	-
	(c) Dairy products	-
	(d) Crafts, fine arts and jewelry	Hand woven carpets, hand made products

#### Table 2.2 Non-mineral exports in Namibia

Source: Barden (1998)

The ostrich industry has also developed very rapidly since independence. According to the National Livestock Census, "the commercially armed ostrich population increased tenfold during the period 1990 to 1996 and has now reached close to 40,000 birds" (Barden, 1998).

#### 2.2 MARKET ACCESS FOR NON-MINERAL EXPORTS

Namibia exports mainly ores and minerals, fish and processed fish products, live animals and meat products. According to the export data for 1998, the European Union (41 percent) and South Africa (30 percent) were Namibia s main export destinations (Chart 2.2)<sup>2</sup>. The other attractive markets were USA (4.3 percent) and Japan (1 percent).

<sup>&</sup>lt;sup>2</sup> The choice for 1998 export data has been dictated by the fact that it was the latest reliable data at the time of writing this paper.

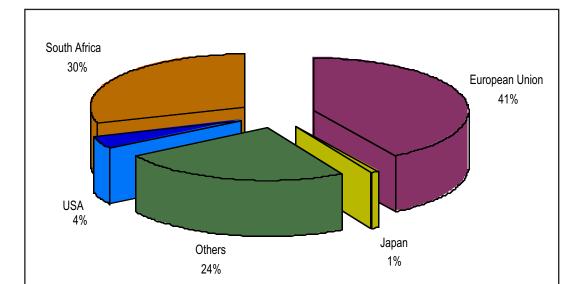


Chart 2.2 Export Share by Type of Product, 1998

The developed-country markets that are of interest to Namibia include the European Union (mainly for meat, fish, hides and skins, and minerals), the United States (mainly for fish), Japan (mainly for fish), and Switzerland (mainly for minerals).

Moreover, Namibia is a member of the Southern Africa Custom Union (SACU), which includes South Africa. In respect of trade between SACU members, some loss of preferences is inevitable as the Uruguay Round Agreements would reduce the common external tariffs. However, for Namibia, this loss is minimized by the fact that some non-mineral exports secured preferential entry into some industrialized countries, especially the European Union (EU) countries under the General System of Preference (GSP) and similar bilateral agreements, such as the Cotonou Agreement (as reflected in table 2.3).

		Impo Tarifi		
Exporter		Industrial	Developing	
		Countries	Countries	
All goods	Industrial countries	4.2	12.8	
	Developing countries	4.6	12.3	
	of which: LCD's	5.0	11.0	
Manufactures	Industrial countries	2.0	11.1	
	Developing countries	3.4	12.0	
	of which :LCD's	3.5	13.7	
Agricultural goods	Industrial countries	32.0	31.2	
	Developing countries	21.9	25.0	
	of which :LCD's	16.2	16.9	

#### Table 2.3 Trade-Weighted Average Tariffs

Source: Preliminary GTAP 5, prerelease 2, using 1997 applied tariff and trade weights, excluding intra-EU trade

Source: Central Bereau of Statistics (1998)

However, uncertainty in the medium to long term still remains, as the implementation of Uruguay Round Agreements unfolds.

#### 2.3 PRESENT EFFORTS TOWARDS DIVERSIFICATION

As already highlighted in the introductory remarks, the pressure from negative price shock of minerals and of other primary commodities from year to year, left the government and stakeholders with no option, but to embarked upon the programme to diversify Namibia's export base away from mineral and increase non-mineral foreign earnings. This could be partly achieved by adding value to local raw materials and encourage export of new types of agricultural products. Follow below are some of these efforts.

# (i) Agriculture Sector

**Grapes, Melons, Oranges, Mangoes and Papayas**: All these products have already been successfully tried on; and some of these (e.g. oranges, papayas and mangoes) have even been practiced at commercial levels. It has been planned to expand exports of all types of horticultural produce as from the year 2000 on wards. There are, however, some infrastructural problems to be solved. For example, cold storage and handling of fruits is below standard both at Walvis Bay and at Windhoek s Hosea Kutako International Airport.

In addition, many of these fruits will have to be exported by air and there is already an acute shortage of airfreight space in Namibia. The issue of quality control has also been highlighted in Bardan s study, particularly the need to develop a national Green Label which would certify that the fruits are free of chemical spray.

**Grapes:** The project on grapes could be regarded to have reached a maturity stage, and a large volume of this product has already been exported to the European Union (EU). Although grape exports to this market from all Africa Caribbean and Pacific (ACP) countries are subject to a duty free quota of 1200 tons per annum, Namibia is fortunate to be the only country within ACP countries exporting table grapes to EU. In 1998, Namibia had already succeeded to export 2800 tons to EU.

**Dates and asparagus:** Efforts are also made to experiment with date and asparagus products. The projects on both products demonstrated that these (products) can be successfully be grown in Namibia. In 1998 42 hectares have been planted out and a further 70 hectares of plantation were planned over the next two years. Presently, the asparagus are marketed in South Africa and are expected to find a profitable market in Western Europe if large projects were to be developed.

**Cotton and tobacco:** Efforts have been made to develop both crops for exports. Cotton growing has reached a fairly advanced stage and some 3800 tons were already produced in the 1997/98. The low quantity of raw cotton production renders cotton Ginnery in Namibia unviable at this stage. Therefore, the raw cotton is presently sent to South Africa for ginning.

**Ostriches:** Ostrich industry has developed rapidly since independence with the commercially farmed ostrich population increase tenfold during the period 1990 and 1996. The largest ostrich farm (i.e. Ostrich Production Namibia) in the country is operating under Export Processing Zone programme (EPZ), which renders it a great deal of success potential through the incentives involved. The industry yields three types of direct export products, namely: adult birds, chicks and eggs. Over the year, these direct export products were very important. However, due to the saturation of the overseas' market for these products, emphasis has shifted towards indirect

export products particularly tanned skins and meat. The meat, which has been accounting for about 20 percent of the value of slaughtered bird some years ago, improved recently to about 30 percent. All European markets are open to ostrich meat and related products, and the progress towards other markets particularly Asia and USA is satisfactory.

**Other potential agricultural exports:** It appears that a number of sub-tropical fruits as well as sugar cane could be cultivated in the North, but so far no commercial trial have been carried out. Trials have also been made to develop export products from wild trees, which are native in the northern part of the country. In this regard, one project (under the ownership of a local entrepreneur) has already been established in the North for the extraction of oil from marula-seeds.

## (ii) Manufacturing and Other Non-Traditional Export Sectors

**Beer and soft drinks:** Although these products are exported mainly to South Africa, there are also some sales to other countries in the region. Namibia Breweries Limited and Namibia Beverages are the two producing company in the industry. Exports to South Africa and other regional markets are expected to continue to grow.

**Dairy products:** The main export products are yogurts, cottage cheese and flavored milks. The exporting company has also been investigating the possibility of adding additional products including fruit juices.

**Hides, skins and leather**: Namibia has a small number of Tanneries, which are processing hides and skins for export. The largest tannery (Meatco's Okapuka tannery) processes all stages of tanning from Wet Blue to Crust to finished leather. The main markets for these are Italy, Japan, and the USA. A sizeable number of livestock is exported on hooves to South Africa, which implies a loss of valuable hides and skins to the Namibian tanning and leather industry. To this end the Government is in the process of introducing an export levy on livestock to be exported on hooves by end 2002.

Moreover, it has been realized that there is a need for technical and marketing skills to develop a viable leather products industry to its full potential for exports. In this connection, a project to improve the leather industry has been initiated under the auspices of the UNIDO National Africa Leather and Footwear Industry Scheme. This is part of a wider Southern Africa project. The project has been assisting the Namibian industry in many different ways (including the provision of a design expert to assist the shoe industry with new designs for export products.

**Finished leather garments and other goods:** Currently Nakara is the only company that is to a large scale involved in the export business of finished leather garments and related goods. The company developed a niche market in Europe for these goods. Indications are that other companies in the same industry find it hard to find niches in overseas' markets. Almost all the Namibian-made shoes for exports have been destined for the South African market.

**Crafts and Jewelry:** The craft industry covers a very wide variety of skills resulting into products such as woodcarving, basketry, pottery, leatherwork, metalwork and beadwork. The main sales are to tourists, but some of the exhibitors are also exporting. Namibia Crafts Centre and Penduka are the two most important organizations in the craft sector. In 1996, the value export products under the auspices of Penduka were recorded at about N\$ 400,000. These were exported mainly to the Netherlands and South Africa.

**Hand-woven carpets:** Carpet weaving uses 100 percent karakul wool for its production. This industry is well established with a firm footing in the export market though on a relatively small scale. The main markets are

Western Europe, especially Germany. Substantial sales are also made to tourists in Namibia. The achievement is largely linked to the technical assistance and marketing advice of the Ministry of Trade and Industry (MTI).

## (iii) Export Processing Zone

It would be a failure for this study not to highlight the progress of this initiative. The Export Processing Zone (EPZ) programme became operational in 1996 through EPZ Act of 1995. Its primary aim is to offer relief from the constraints imposed by SACU obligation on manufacturing (NDP1, 1995). An anti-export bias has been created by the import tariffs imposed on intermediary goods, which increases the input costs for local manufactures and thereby reducing their competitiveness. The government aims to use the EPZ to attract companies mainly manufacturing goods for export hoping that the EPZ enterprises will also stimulate development of non-traditional exports to the non-SACU regional markets.

In 1994 before the launch of EPZ, the Government introduced an exemption from tax of 80 percent of all profits accruing to the export of manufactured goods excluding manufactured meat and fish products. The incentive has been available to whether or not the goods were manufactured in Namibia, and was designed to promote Namibia as a regional trading centre. To further promote exports, manufacturers, under the EPZ scheme, are fully exempted from import duties on inputs, if all or almost all their produce is exported, preferably, to destinations outside the SACU area.

However, according to the review of NDP1, measures taken by the export sector including the EPZ to bring about the diversification of the economy could not yield the desired results. According to the Ministry of Trade and Industry, this is mainly due to the lack of entrepreneurship and persistent business culture of retailing foreign produced goods rather than forging in the manufacturing of products for exports. Therefore, the level of diversification remains modest (NDP2-Draft, 2001).

According to Offshore Development Company (ODC)<sup>3</sup> report of 2000, "the manufacturing sector will expand significantly with some 54 EPZ enterprises engaged or planning to engage in export-oriented manufacturing of various products, contrary to some concerns that the EPZ programme would bring no value addition" (MIT, 2000). These companies are expected to invest N\$ 9.2 billion in manufacturing activities, which is 99 percent of total projected investment, by EPZ companies in the Namibian economy. Table 2.4 serves to support this and to reflect on other important issues e.g. the level of employment generated by the EPZ companies.

Efforts were made to provide export data of EPZ companies. However, the processing of import and export data was still underway at the time of preparing this paper. Therefore, the figures provided in Table 2.5 are for only some few companies and does not include the third quarter of 2000. Despite the difficulties in these series, there is a general upward trend. So far only six companies have disinvested from Namibia's EPZ; and the following (according to ODC report of December 2000) are the main reasons for their withdrawal:

- failure to do proper market research prior to seeking EPZ status
- ready market in the domestic environment as an alternative to export market
- I failure to raise required funding for their operations
- various infrastructural shortcomings in the region, especially in the internet related services

<sup>&</sup>lt;sup>3</sup> The Export Processing Zone was set up as a joint initiative between the Government of Namibia and the private sector. Its main duty is to manage, promote, market and monitor all EPZ activities in Namibia.

Co	mpany	Locality Activity	Economic Investment	Actual (N\$) Employment	Actual Started	Year
1	Johanna Haida Teddybears	Swakopmund	Manufacture of Teddybears	2,100,000	13	1997
2	Namibia Press And Tools	Walvisbay	Manufacture of motor Vehicle components	20,000,000	50	1996
3	Branch Energy	Windhoek Stones	Manufacture of gem	1,000,000	1	1998
4	Libra Bathroomware	Walvis bay	Manufacture of acrylic Bathroom and accessories	5,500,000	69	1998
5	Transvehco	Walvis bay Vehicle components	Refurbishing of motor	-	0	1998
6	Ostrich Production Namibia	Keetmanshoop	Ostrich meat processing And tannery	78,000,000	166	1998
7	Namgem Diamond Manufacturing	Okahandja	Polished diamond Manufacturing	10,500,000	81	1998
8	Namibia Fashion Knits	Windhoek	Manufacture of ladies Fashion ware	300,000	12	1998
9	Double V Manufacturing	Windhoek	Manufacture and Assemle of electronic Products	1,000,000	10	1997
10	The Tax Free Warehouse	Oshikango	Breakbulk and warehousing of General consumer goods	15,000,000	11	1997
11	Borries marking Systems	Windhoek	Manufacture of marking machines, number heads And steel types	2,750,000	9	1998
12	Marine Ropes	Walvis bay	Manufacture of ropes And associated products	2,000,000	10	10
13	Barden EPZ Enterprise	Oshikango	Export of motor vehicles And parts	2,400,000	1	1
14	New Sun Household	Tsumeb	Manufacture of Aluminium household And kitchenware	3,000,000	30	30
15	P. Products	Windhoek	Manufacture of Electronic equipments	150,000	3	1998
16	Namibia King Lion Clothing	Walvis bay	Manufacture of textiles	2,500,000	22	1999
17	Desert and Ocean Company	Luderitz	Manufacture of wellness Cosmetic products	892,115	8	2000

Table 2.4	EPZ Operational companies as at 31 December, 2001
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Com	pany	Locality Activity	Economic Investment	Actual (N\$) Employment	Actual Started	Year
18 Ka	alahari candles	Mariental	Manufacture of candles	250,000	47	2000
	Pngopolo Processing	Tsumeb	Processing of blister Copper and arsenic Trioxide	46,000,000	200	2000
20 N	lamzinc	Rosh Pinah	Construction, Development and Operation of a zinc Refinery	700,000,000	970 (Jobs by contractors)	2000
21 Fi	irst Trading	Oshikango	Manufacture of blankets	430,000	3	2000
	arnow Porcelain Iamibia	Windhoek	Mnufacture of porcelain Dishes	1,000,000	17	2000
	luana Industry and rade development	Windhoek	manufacture of biscuits And sweets	-	9	2000
- · · ·	lamibia Industrial Composites	Windhoek	Manufacture of products For the abraisive industry	3,000,000	12	1999

 Table 2.4
 EPZ Operational companies as at 31 December, 2001 (cont)

Source : Ministry of Trade and Industry, 2000

From the MTI's perspective, the EPZ programme has already made a positive impact in only four years of its operation in Namibia (in terms of job creation, transfer of skills and technology as well as in generating foreign exchange earnings). On this basis, the Ministry regards the performance of enterprises actives in the EPZ schemes as, generally, satisfactory. Moreover, the ODC is optimistic about the continued growth of EPZ activity, especially in the manufacturing sector as well as growing interest from the investment community.

#### Table 2.5 Imports & Exports of EPZ enterprises, 1996-2000

	1996	1997	1998	1999	2000	Total
Imports	-	-	2 034 297	39 624 947	27 018 369	86 677 613
Exports	33 756	466 455	22 622 200	89 661 561	43 009 425	155 793 397

Source: ODC, 2000

# 3. REVIEW OF RELEVANT LITERATURE

Since the 1970s, there have been both erratic swings and a secular decline in the international prices of primary commodities especially agricultural raw materials and basic food stuffs, which commodity schemes such as International Coffee Organization (ICO) quota, have been unable to eliminate (Kasekende et al., 1994). As a result, countries that specialized in a narrow range of primary commodities suffered most from declining export earnings and a loss in their share of the international export markets. For countries that spread the risk of fluctuation in international prices by having diversified their sources of foreign exchange earnings especially manufactured products, these erratic swings and a secular decline in the international prices of primary commodities had a relatively less impact on their foreign exchange earnings.

These developments and similar trends since 1970 have produced a new theoretical reaction, which argues that in a world of changing demand and supply conditions, international trade should be based on dynamic comparative advantage<sup>4</sup>. This was carried out by focusing on demand and supply conditions, changes in commercial policies, trade barriers, environment considerations, and risk evasion given imperfect foresight. These elements will guide the objective of this paper.

#### 3.1 CHANGES IN SUPPLY AND DEMAND

(i) Changes in supply: Some schools of thought argue that, generally, export units should sell to fewer markets and deal only with small number of the "best" markets in the world (Osuntogum et al., 1997). This trade policy strategy also referred to as concentration principle is misleading because it over estimates markets stability and the ability to select the "best markets" (Piercy, 1983/84). He argues further that it ignores the opportunities that may exist to compete in a world market and constraints imposed by competitors' actions. On these bases, he suggests that an exporting country should attempt to distinguish practical situations where larger markets numbers may be more valid.

Meanwhile, Kasekende et al, (1994), warns against complete specialization especially in primary commodities. He maintains that even if price elasticities of supply of these commodities turn out to be large in the long run, a country cannot adjust to short-run booms or decline in international prices. The IMF (1987) generally supports this view and recommends that it is desirable to diversify into commodities of different price elasticities of supply as a deliberate policy to keep the productive structure flexible.

When planning to develop new exports, a country must have a broad awareness of what potential competitors are doing, to avoid moving into easily flooded markets for diversification (IMF, 1987). Thus, the IMF advocates a dynamic comparative advantage. This calls for diversification to develop new exports as the country adjusts its productive structure to changes in domestic resource endowments such as skills from education, or changes in production technology and input mix, or change in the availability of imported inputs in response to the foreign exchange constraint. Even if the resource base and inputs remained unchanged, a country s international competitiveness changes in response to the domestic macroeconomic environments, such as the rate of inflation and the competitiveness of other suppliers of identical commodities Kasekende et al, (1994).

(ii) Changes in demand: An exporter facing rising income in the importing country has to diversify by increasing the proportion of commodities, which are income-elastic in order to realize rising export earnings. Even if

<sup>&</sup>lt;sup>4</sup> The new theory, which is based on dynamic comparative advantage, takes care of both secular and of cyclical fluctuations and/or trends — but it focuses more on secular fluctuations. The original theory focused exclusively on account of cyclical fluctuations and/or trends.

incomes in the importing countries are constant, tastes change and indifference maps shift over time, with changes in the psychological references of different generations of customers. This calls for diversification to generate new exports to cater for the changing and needs

## 3.2 TRADE BARRIERS

The pressure to reduce tariffs under GATT changed the face of trade barriers. It turned into the new formation of a proliferation of non-tariff regulation, sophisticated restraints, bargaining, etc. For example, the political lobby to protect agriculture in both European Economic Community (EEC) and the USA has remained powerful to such an extent that it even dampened United Nations initiative to reduce trade barriers. While these new form of trade barriers has affected the developing countries that had successfully diversified their export base notably in 1970s, the newly industrialized countries (especially Asians countries), executed interesting and successful-varied responses.

First, they have entered into joint ventures with multinationals to help them market their exports into the countries where they are likely to be excluded (UNCTAD, 1990). Second, they embarked upon a more sophisticated product differentiation into new qualities of the product, which are not yet subjected to trade barriers. A third strategy has been to find ways to enter into new market with less prohibitive barriers. In all these three routes, non-tariff barriers have not reduced the exports and foreign exchange earnings of the newly industrialized countries that adopted these three strategies. The success of these strategies in these countries was mainly due to the fact that they have more flexible export structures through diversification. This suggests that diversification is an important policy to adjust to a hostile international environment.

Meanwhile, it has been observed that the countries that have been granted preferential entry into protected markets, and are therefore not facing the threat of exclusion, have had no drive to diversity. Consequently, their earnings from primary products have declined from the secular trend in international prices. It is also argued that the formation of regional markets by LDCs has borne no fruit in the development of diversification policy, mainly because many of these countries have pursued protectionist policies, which inhibit the drive to do so. However, it is argued that regional markets among LDCs would not be a problem per se. They are perceived to provide an additional market for the home country, which could form a learning ground to increase both production and marketing efficiency before entry into the international market. Moreover, the member of LDCs to bargain for rounds of trade liberalization with other regional blocks among developed countries could use a regional market as collective tool.

#### 3.3 INDUSTRIAL CAPABILITY

The countries with rising export earnings are those with a higher proportion of manufactures in total exports. This has been confirmed in the recent empirical literature, which showed a close and positive relationship between export earnings and industrial capability (Kasekende et al., 1994). Thus, industrial capability provides country opportunities for product diversification on the supply side. Furthermore, the industrial, production environment is easier to control, compared with the unpredictable weather changes for agricultural commodities. Moreover, industrialization brings with it the development of infrastructure and technology, which makes room for maneuver in the quest to reduce unit costs. Lower costs increase the competitiveness of the home country in the international market. Moreover, it has been observed that countries that have built new industrial capabilities and exports in the recent past have been able to diversify into a wide range of agricultural processing activities to add

value and improve quality (Kasekende et al., 1994).

#### 3.4 Environmental considerations

It has been observed that tastes in many more developed countries are changing towards pollution-free agricultural products, grown with minimum chemical inputs. The less developed countries (LDCs) that have favorable weather and good soil are expected to respond to this situation by exporting organically grown food, especially during the off-season period when developed countries cannot grow comparable products cheaply. Common obstacles in LDCs that prevented the appropriate supply response are related to lack of rapid transport to deliver these commodities fresh to markets, lack of processing capacity to preserve them in the form that lengthens their shelf life.

#### 3.5 RISK EVASION

This dynamic comparative advantage seeks to highlight the fact that it is advisable to spread the risk of fluctuation in international prices by diversifying the sources of foreign exchange earnings directly, by a deliberate drive to export commodities that are not subject to identical swings in international prices (Kasekende et al, 1994). Thus, diversification in this fashion, ensure that a country would acquire foreign exchange earnings from commodities that are experiencing export boom, even if other commodities may be experiencing export-down turn.

#### 3.6 CHANGES IN COMMERCIAL POLICIES

While the North-South trade has been on for a long time ago, the growing interest in promoting South-South trade amongst policy-makers and scholars can be traced to the mid-1970s. The South-South trade, however, gained more momentum ever since Lewis s argument that developing countries could, through greater South-South trade and regional integration, exploit more fully the dynamic comparative advantages that they may have in production of certain kinds of goods. However, colonialism, including biases in favour of North-South trade, worsened the trading activities of South-South. In this regard, an exporter is more likely to be advised to find buyers in developed countries (especially in USA and Europe) than elsewhere by trade promotion agencies (Osuntogum et al., 1997). Trade in food, semi-processed and manufactured goods are cited as some of the areas with scope for a good deal for this trade i.e. inter-developing country trade. This would help to expand the size of market that would make new manufacturing sectors economically viable.

These arguments were among the major forces behind the formation of regional trading groups in LDCs. However, critics argue that these initiatives failed to achieve their trade goals and/or objectives (particularly to realize higher inter-developing country trade levels), citing high tariff and non-tariff barriers (including import licensing), low income levels, inadequate regional trade payment arrangements due to the effectiveness of several clearing arrangement, inadequate trade financing, lack of trade policy coordination and lack of proper communication infrastructure as the major barriers (Kasekende at, 1991).

Implicit in this analysis is that potentials for trade among African countries exist and that what is needed is to identify and deal with specific factors limiting the realization of the potentials. Roelofsen (1989) attempted to support this position by citing that the annual import bill for the products traded under Intra-Preferential Area for Eastern and Southern Africa Trade (PTA), amounted to US\$ 5 billion, or about 50 percent of the PTA's total imports between 1983 and 1987. This points to the high potential among developing countries to realize higher

inter-developing country trade levels. However, some analysts (including the World Bank) refutes this arguments, maintaining that South-South countries, particularly African countries have similar production and export profiles and therefore have little or nothing to exchange (World Bank, 1991).

The World Bank (1991) and Lyakurwa (1991) further warn that the composition of a diversifying country's export has to match the import structure of the target countries<sup>5</sup>. According to Osuntogun et al. (1997), this seems to be the underlying basis for most studies that have attempted to evaluate the possibility of trade within a region particularly in developing countries. These studies have focused on testing the hypothesis that: " .. because South countries<sup>6</sup> have similar factor endowment and climatic conditions, their production (and therefore their export) patterns are usually too similar, and with only limited complementarities, the potential for a regional trade could be too small" (Osuntogun et al, 1997).

Models that have featured most in testing this hypothesis are production-export similarity index (Koesster, 1986), relative comparative advantage measure (Donges et al., 1982), comparative export performance measure (Koesster, 1986), and trade overlap indicators (Koesster, 1986), commodity composition of African Trade and Intra-African Trade Potential (Oramah et al., 1998).

All these studies seem to agree that there are considerable potentials for intra-African trade<sup>'</sup>. However, according to Oramah et al. (1998), these studies appear to be too general to be significantly useful to particular countries seeking to expand their exports to other African countries. Hence they (i.e. Oramah et al., 1998) stresses that there is a need to do a complementary study, which will further estimate the scope for African countries to substitute non-African imports with African imports. "It is only when this is done that the feasibility of realizing the potentials identified may be better understood" (Oramah et al., 1998).

Most (if not all) the issues raised above are relevant to Namibia. The following few observations would suffice as a demonstration.

Trade barriers are one of the constraints for a desired level of trade. The government of Namibia, in its part, has been using different avenues to break through. The formation of the existing regional trading bloc and related groupings (e.g. Southern Development Community, Southern African Custom Union, etc.) are partly formed in response to trade barriers. They have been used as collective tools by the member countries to bargain rounds of trade liberalization and other related issues. The government has also been constantly persuading local investors to form joint ventures with foreign investors and multinationals. This is not only for skill transfer, but, equally so, to help local partners market their exports into the markets/countries where they are likely to be excluded.

With regard to the significance of industrial capability, Namibia is conversant with the fact that the countries with rising export earnings are those with a higher proportion of manufactures in total exports. It is on this basis that the Namibian Government has made the development of manufacturing industry a core element in its economic development policy. Moreover, the original design of the EPZ programme was an instrument of export-led

<sup>&</sup>lt;sup>5</sup> This view, however, does not preclude him from supporting the argument that export diversification is important, particularly in the sense that it plays a crucial role in reducing the variability of the export earnings of developing countries and raising the growth rates of both exports and domestic output (Osuntogum et al., 1997).

<sup>&</sup>lt;sup>6</sup> South countries concept is used to mean developing countries.

<sup>&</sup>lt;sup>7</sup> Notwithstanding that agreement, Oramah et al. (1998) maintain (based on their study) that it is likely that removing intra-African trade barriers, through reducing tariff barriers and quantitative restrictions, would benefit, in the medium term, individual African countries unequally.

industrialization of the Namibian economy.

On environmental considerations, grape producers have already reaped the benefit of exporting their products during the off-season period when more developed countries cannot grow comparable products cheaply. However, they have been experiencing the problem of lack of rapid transport to deliver these commodities fresh to markets (as captured in the literature review). The fact that they do not produce wine could also be associated with the observed lack of processing capacity in LDCs to preserve their products in the form that lengthens their shelf-life.

With regards to risk evasion, it has already been mentioned elsewhere in this paper that the negative price shock of minerals and of other primary commodities have been posing threat to the state of economy. Therefore, the efforts to diversify to non-mineral products (as highlighted elsewhere in this paper) are nothing, but ways to spread the risk of fluctuation in international prices by a deliberate drive to export commodities that are not subject to identical swings in international prices.

Concerning changes in commercial policies, in the past Namibia used to export virtually all her major export products to Europe and South African markets. This could be argued to have been in line with concentration principle school of thought which argue that export units should sell to fewer markets and deal only with small number of the "best" markets in the world. This inclination is currently shifting towards identifying non-traditional market. This includes both North-South and South-South trade on the basis of the contrasting arguments highlighted above. By so doing exporters would be able to select the "best markets" reduce the risk of market instability, as these would no more be concentrated.

# 4. DATA AND METHODOLOGY

Data description: As already mentioned above, the main thrust of this study is to identify countries outside the existing traditional markets to which Namibia could export its commodities. The commodity classification used to compute the similarity measure is that of the Standard International trade Classification or SITC three digits level. The commodities were captured from 1 to 3 digit levels. Since we were more interested in the individual commodities, the computation of similarity measures of most commodities involved few classes. The 4-class commodity data set was the largest. Small number of classifications is, generally, good because it avoids the problem of locating different and non-substitutable commodities in one data set.

Most of the data used were obtained from selected Year-Books of FAO (i.e. Food and Agriculture Organization of the United Nations). Since Namibia has just attained her independence couple of years ago, FAO could not provide most of data needs for this country. As a result, most of the data on Namibia was obtained from Namibia Central Bureau of Statistics (CBS). However, some of these data were not comprehensive, and therefore a mini-survey to fill the gaps had to be carried out. CBS' data is recorded in the harmonized Commodity Description and Coding System (which is one to one correlated to the SITC, Rev.3). Therefore, conversions were made in order to arrive at a consistent commodity breakdown that will allow the computation of the similarity measures and application in other supportive techniques as discussed below.

Methodology: This attempt has been made possible by similar studies undertaken by several authors in recent years. The most influential ones are Osuntogun et al. (1997) the diversification of Nigeria s non-oil exports to no-traditional markets; and the Beers and Linnemann (1991) commodity composition of trade in manufactures and South-South trade potential. Thus, these studies have guided this study to a great extent. In all these studies, the focal technique among other supportive methods as highlighted below was the one that looks at the export structure of one country and the import structure of another country. To do this, export-import similarity measure was adopted. It (i.e. export-import similarity measure) was considered as an appropriate one, because it is the only measure, which is designed to compute a trade potential index, which show the relative strength of individual country as a supplier of a given commodity to other countries (Beers et all. 1991). This study is, therefore, more export-import data driven.

Efforts have been made to first identify some products with export potentials. Therefore, supportive techniques applied in this study include measures to identify products with export potentials, which in this study are obtained through comparative advantage measure, which captures products in which Namibia has comparative advantage in exporting.

Other supportive techniques include: measures to determine the degree of openness to imports to determine Namibia s potential to export to sample countries or markets, and measures to determine the concentration of Namibia s exports, which is necessary for a proper determination of the export-import similarity measure to rely on in reaching conclusions about potential markets, etc. It is important to briefly discuss some of these techniques.

# 4.1 ADOPTED TECHNIQUES

# 4.1.1 Revealed comparative advantage measure (RCA)

Balassa s (1965) concept of revealed comparative advantage is adopted in this study to identify products in which Namibia has comparative advantage in exporting. This is measured by the share of a given product in a

country s total exports relative to the good s share in total world exports. The RCA index may take values from zero to infinity, with those above unity indicating that the country has a comparative advantage in the product.

The definition of RCA is outlined in equations 1 as presented below.

$$RCA_{j} = \frac{(\chi_{ij} \div \chi_{it})}{(\chi_{jw} \div \chi_{tw})}$$
(1)

Where:

 $X_{ii}$  = the value of country is (Namibia) exports of commodity j

X<sub>it</sub> = total exports of the category of exports under consideration of country i (Namibia)

W = subscript referring to world totals.

#### 4.1.2 Degree of openness measure

The degree of openness of a country is defined as the sum of imports and exports as a percentage of gross domestic product (GDP) of the country (Edordu, Oramah and Osuntogum (1997)). The larger the index, the higher the degree of openness and vice versa.

Degree of openness can be mathematically expressed as in equation (2)

$$D = \frac{(E + M)}{GDP}$$
E = Exports
M = Imports

Ncube (1991) maintains that indexes such as the Nominal rate of protection and effective rate of protection are much better measures of protection or openness to imports. However, to obtain these estimates one requires highly disaggregated data, which are sometimes difficult to get (Osuntogun et al., 1997). Therefore, some authors find the degree of openness as mathematically expressed in equation (2) to be a more convenient indication of protection against imports.

# 4.1.3 Export — Import similarity measures

Two measures for degree of commodity correspondence between the exports of one country and the imports of another country as featured in Beers (1991) will be adopted in this study. One of the measures is known as COS, which according to Beers (1991), was developed originally in Lineman's (1966) work. The COS is the cosine of the angle between the vector of country I's (Namibia's) export and the vector of country's imports in an n-dimensional commodity spare (Allen, 1957). The other one is called EIS, which is obtained by summing over all commodity classes of the share of commodity class K in country I's (Namibia's) export or in country J's import (Osuntogun et al. (1997)).

The two measures can be computed as in equations 3 and 4, as given below.

$$COS_{ij} = \sqrt{\sum_{k} \mathbf{E}_{ik} \cdot \mathbf{M}_{jk}} (3)$$

and

$$EIS_{ij} = \sum_{k} \min \left[ \frac{\mathbf{E}_{ik}}{\sum_{k} \mathbf{E}_{k}}, \frac{\mathbf{M}_{ik}}{\sum_{k} \mathbf{M}_{ik}} \right] \dots \dots \dots (4)$$

Where:

i,j and k = refers to exporting country, importing country and commodity class respectively.

E<sub>ik</sub> = export of country i in commodity class K

 $M_{jk}$  = imports of country j in commodity class K

K = commodity class 1, .n

Both measures range between zero (no similarity or correspondence) and one (perfect correspondence). Generally, COS yields greater numerical values than EIS when trade is concentrated due to its non-linear properties. Thus, the two measures may not produce identical results as may be expected.

#### 5. **RESULTS AND DISCUSSIONS**

#### 5.1 IDENTIFYING PRODUCTS

The process of identifying promising products that Namibia could export (in this study) has been partly guided by the Standard International Trade Classification Revision 2 (SITC, Rev.2) as reported in the Food and Agriculture Organization's (FAO) Trade Year Book (various editions). The Revealed Comparative Advantage (RCA) measure was adopted, and the index was calculated for all commodities (within the SITC sections contained in the FAO Trade Yearbooks) for 1994 and 1998 to enable inter-temporal comparison. A higher RCA indicates that Namibian exports of the commodity concerned is competitive relative to the world export of the same commodity, and vice versa.

As already mentioned in section 4, the RCA index may take values from zero to infinity - with those above zero indicating that the country has a comparative advantage in the product. From the results as presented in Table 5.1, Namibia can be said to have had comparative advantage in exporting most of her products in 1994. Topping the list in this regard, is karakul pelts, hide, cottonseed, and raisins, in that order. The processed exports for which Namibia had comparative advantage in exporting were beer, fish (processed/canned) and beef.

It could be observed that by 1998, comparative advantage of most products had been eroded and only few improved. For example, RCA for karakul pelts fell from 136.55 in 1994 to 45.75 in 1998, while the index for hide dropped from 111.99 to 60.18I during the same period. This was a reflection of a decline of Namibian export of these items relative to world exports. RCA for ostrich eggs was also lost.

Erosion of RCA was also observed in commodities such as raisins, fish, and wool. Meanwhile, it (RCA) was gained in live animals, particularly sheep and goat, beef, grapes and beer; while cottonseed remained constantly high at 85.85. Again, RCA indicates higher Namibian exports of the commodity concerned relative to the world export of the same commodity. It could therefore be concluded that, the RCA of Namibia exports during the period under review have been, generally, mixed. The erosion of the RCA of fish and hides are linked to the decline in the production of these species due to unfavorable water conditions at sea and drought (in case of hide) - both in recent years, respectively. The erosions of the RCA of wool and karakul pelts were linked to the decline in the price of these commodities in the world market. The causes of erosion in all these products were not attributed to structural factors and were therefore short-lived. However, all these products are the pillars of Namibian economy. It was therefore deemed imperative to include all these products in the main sample of products to be analyzed for RCA in table 5.1 below.

Effort has also been made to identify other important products for which Namibia does not have any or adequate trade data to estimate the revealed comparative advantage (RCA) index. However, there is consensus on the viability of most of these products, particularly food (vegetables, fruits and other food products)<sup>8</sup>. The other products are metals related products and the choice of metals is because Namibia is a mineral producing country. Mineral resources can probably be more efficiently exploited by adding more value locally before exporting the resultant product to foreign markets. Metals could form the core of resource-based industrialization (RBI) as has been the case in many minerals/hydrocarbon-producing economies like Brunei, Nigeria and Malaysia. The metal-related products chosen in this study (i.e. gas, cement, cutlery, steal and copper nails, metal

<sup>&</sup>lt;sup>8</sup> For more information in this regard, see Barden (1998) and Melber (Nepru) (2000)

tanks) are those of common use and may therefore attract interest from all markets of both developing and developed countries. This strategy is in line with the argument that there is more scope for trade deal in food, semi-processed and manufactured goods between primary producing developing countries (Osuntogun, et al 1997). The additional-product sample can be observed in Table 3X.A and 3X.B at the appendix section.

It should be pointed out that the choices of products analyzed for RCA were not influenced by the issue of General System of Preference (GSP). This is because these schemes are time bound and subject to uncertain renewal, often on annual basis. Some recipient countries have noted instances where preference-granting countries have attached "non-economic" conditions to renewals. Therefore, these and other limitations (according to some analysts) undermine the benefits provided by the GSP since they increase uncertainties about market access. Although the margins of preference provided by the GSP schemes and bilateral trade agreement to beneficiaries are often significant (IMF and World Bank, 2001), as reflected in Table 2.3, it takes time to develop a product before you export it. This view is valid in the sense that globalization and its free trade tribute catches up with developing countries faster than many recipient for GSP thought would be.

Although the above products, particularly those for which Namibia has comparative advantage may have good market prospects, there is still a need to prepare for stiff competition even from other developing countries such as Zambia, Tanzania, etc. This will be more so if the bulk of these products are unprocessed. Therefore, the issue of processing capacity should also receive special attention in Namibia. The fact that most items identified are agricultural suggests that agro-based industries will be the most logical starting point to process, manufacture and differentiate. This would build a more flexible export base.

Products	1994	1997	1998	Changes
1 Cottonseed	86.09	-	85.85	Constant
2 Hide	111.99	-	60.18	Eroded
3 Karakul Pelts	136.55	-	45.75	Eroded
4 Raisins	9.58	-	6.81	Eroded
5 Beer	3.27	-	4.21	Improved
6 Onhove Sheep & Goat	2.51	-	3.1	Improved
7 Grapes	1.80	-	2.77	Improved
8 Meat of Cattle (fresh)	2.23	-	2.64	Improved
9 Wool	1.71	-	1.69	Eroded
10 Fish*	1.71	1.64	-	Eroded
11 Onhove Cattle	0.79	-	0.78	Constant
12 Eggs in Shell (Ostrich)	4.08	-	0.52	Eroded
13 Meat of Sheep & Goat	0.81	-	-	-
14 Canned Meat		-	-	

Table 5.1 Revealed Comparative Advantage Measure of Namibia exports - (1994, 1997 and 1998)

Source: Calculated from FAO trade year book (various issues).

- = Data is not available or no commend due to unavailability of data.

#### 5.2 IDENTIFYING THE MARKETS

Having identified some products that hold promise in the country's non-mineral export diversification drive, it became essential to identify potential markets for these products. Selections for potential products markets followed the same SITC sections used to identify the product. This being a static analysis, the estimates are calculated for at least two years. This would permit inter-temporal comparison and, somehow, ascertain whether a given country imports a given product as a policy outcome and not a randomly occurrence.

#### The criteria for the market selection adopted in this study are as follow:

As with any selection exercise carried out, the study adopted the following criteria that guide the initial phase of market identification process. Thus, all the countries that are included in this study have satisfied one or some of these criteria.

*First, the market's ability to pay:* The country should have a GDP in excess of US\$5 billion in 1998. This would serve as an indication of adequate purchasing power (Edordu, Oramah and Osuntogun 1997). In other words, this would ensure that economies selected are relatively wealthy (at least in the developing country context). Most markets, particularly Africa's are left out, largely due to this criterion.

Second, the degree of openness: Some countries are chosen due to their high degree of openness to imports. As already highlighted in section 4, the degree of openness of a country is defined as the sum of imports and exports as a percentage of GDP of the country. It serves to indicate the extent of protection against imports. Generally, smaller countries tend to be more open to imports than bigger countries (see Appendix: Table 1X.A). However, some argue that degree of openness would be captured better through the total current account approach (i.e. current account/GDP). Additional table (i.e. Table 1X.B) is therefore provided, but the selection has been guided by the conventional approach of which results are presented in Table 1XA.

*Third, the proximity of the market/trade partner:* According to Edordu, Oramah and Osuntogun (1997) "the strategic thinking in any export policy is that the country should target near markets and few distant markets". Based on this guideline, many SADC member countries are considered. It is also mainly due to this criterion that many African markets are retained or considered. However, it had to be combined with the two former criteria so as to filter out as many other African markets as possible.

*Fourth, Regional market and/or groupings:* Most countries, on all continents, are now members of regional trade agreements - customs unions, free trade areas or other preferential arrangements (e.g. SADC, COMESA, ECOWAS, etc.). This consideration has also influenced the selection of certain countries.

*Fifth, major traditional trading partners:* This criterion guides the incorporation of countries such as United Kingdom (UK), USA, Spain, etc.

*Sixth, historical informal/formal trade links with Namibia:* This criterion overlaps with other criteria, particularly the fifth criterion and qualifies markets such as Germany, South Africa, etc.

*Seventh, Others:* Special consideration was given to some far developed markets in Asia (i.e. Japan and Singapore), Europe (i.e. Netherlands, France, Denmark, Belgium, Norway, Switzerland, and Sweden), America (i.e. Canada). Other far developing markets (such as China, Indonesia, Korea, Malaysia, and Thailand) were also considered. The guiding principle here is the importance of these markets in the global trade environment.

At this stage, both sample products and markets to be included in this study are identified. This set a stage for the application of export-import similarity measure. Two measures of export-import similarity, EIS*ij* and COS*ij*, were used in the study (as already highlighted in the section on methodology) to measure the expected intensity of export of various sample commodities<sup>9</sup> to the identified markets.

A cut off point of 0.6 on each of the two measures was adopted so that any country with a COS or EIS measure equal to or greater than 0.6 would be considered to have a reasonably matching import structure for Namibian export of that particular product<sup>10</sup>. These results are presented at the appendix section of this paper.

The two measures produce different, but similar results - with COS (as in many studies), generally, produced higher results than EIS. However, both measures give generally the same ranking regarding countries that have the greatest potentials of importing Namibia' s exports.

#### Following is the analysis of the outcomes of these measures, particularly, COS measure.

(i) Beverages: Most of the sample markets chosen showed the matching import structure for this commodity, especially in 1993 and in 1994 (see Appendix: Table 2X.A (i) & 2XB (i)). However, after these two years, the sample-African markets have showed somewhat less favorable import structure for beverages in both 1996 and 1998 (with the average COS-indices of export-import similarity stood at 0.58 and 0.49, respectively). In these two years, the most attractive markets in Africa for this commodity were Gabon, Morocco Kenya, South Africa, Nigeria and Botswana. Thus, Namibia's traditional markets for beverages (i.e. South Africa, Kenya, and Botswana) have also been captured.

The most attractive markets for beverage in the European market, particularly in 1996 and 1998 were Italy, UK, Spain, Switzerland, Sweden and France (i.e, largely EEC member countries); while in Asia they were China, Thailand, Japan, Malaysia and Singapore. The average COS-indices for export-import similarity of the chosen-European market (in both 1996 and 1998) were above 0.70 (see Appendix: Table 2X.A (i)). It is also worth noting that the import structure for beverage in the world's biggest markets, particularly China, UK, US, Japan and also Brazil have been attractive in all four years under review (i.e. 1993, 1994, 1996 and 1998).

(ii) Skin, hide and wool: The import structure for this product category was matched mostly by European markets, with the average COS-indices of all-selected European markets stood at 0.97 in 1990 and 0.78 in 1994 (see Appendix: Table 2X.A (ii) & 2XB (ii)). However, the average COS-index for these markets fell to 0.52 (i.e. below the threshold) in 1998. Topping the list throughout all three years under review (i.e. 1990, 1994 and 1998), on average, were Turkey, Portugal, Belgium, Switzerland, Spain and Italy.

Although the import structures in the Asian markets were also attractive in both 1990 and 1994, the indices for these markets dropped in 1998 (with the exception of Malaysia, Singapore and Thailand). The African markets for these commodities showed the least attractive potential (particularly in the first two years under review). It, however, improved (particularly in Cameroon, Kenya, Tunisia, Zimbabwe, Nigeria and Botswana) remarkably in

<sup>&</sup>lt;sup>9</sup> In computing the similarity measures using aggregate data under Standard International Trade Classification, only total exports of country i (in this case Namibia) in commodity class k (Eik) and total imports of country j in commodity class k(Mjk) are needed. For more clarity on this see the relevant formula in the preceding section on methodology.

<sup>&</sup>lt;sup>10</sup> It should be emphasized that the estimated export-import similarity measure can be interpreted as reflecting the trade potential or expected intensity of bilateral trade flow from exporting country i to importing country, j. Thus, a non-zero value of COSij or ElSij does not necessary imply that in actual fact, country i does export to country j (Aramah et al, 1998). Neither does a zero value of COSij or ElSij necessary imply that, in actual fact, country i does not export to country j. It should also be pointed out that a choice of 0.60 as a cut-off point (particularly for COS-index) is far from being lenient as some studies (e.g. Oramah B.O. and Abou-Lehaf C., 1998) have chosen a threshold of 0.40.

1998. The average COS-index for these highlighted African markets increased to 0.78 in 1998 from about 0.54 in 1990 (see Appendix: Table 2X.A (ii)). From a regional perspective, these markets fall under either SADC, COMESA, ECOWAS, Central or North Africa regional-trading blocs. The improvement in the export potential to these markets could therefore be linked to the intensification of regional trade within the continent (i.e. Africa) since the early 1990s.

As with most products, the world s biggest markets (particularly Brazil, Japan, USA and China) have shown very matching import structures for the product category concerned throughout all three years under review.

(iii) Meat and meat preparations: The individual markets with the most matching import structure for this product category in 1990, 1994 and 1998 were located in Central, West and North Africa as well as Asia (see Appendix Table 2X.A (iii) & 2XB (iii)). Potential African markets were Ivory Coast, Egypt, Morocco, Ghana, Tunisia and Gabon; and Asian's were Japan, Republic of Korea, Thailand Malaysia, Indonesia and China (see their respective COS-index results at the Appendix Table 2X.A (iii)). The export potentials in these markets have been maintained constantly in almost all three years under review. It is, however, worth noting that the average COS-indices of all-selected African markets were below the threshold in both 1994 and 1998 (as they recorded merely 0.59 and 0.56, respectively). During 1990 and 1994, it (i.e. export potential) was least attractive to Africa-Sub Saharan markets, particularly in SADC (among all selected markets world-wide).

The exports potential for this commodity to the European markets were also very favorable in all three years under review (led by markets such as Italy, Denmark, Spain and France). The average COS-indices for exportsimport similarity of the selected European markets were above 0.80 in all three years under review (i.e. 1990, 1994 and 1998). These markets (despite their high average COS-index) were, however, not leading - possibly due to their relatively high protection stance in beef and related products.

Meanwhile, the world's biggest markets particularly Brazil and USA, (beside Japan and China, which have already been mentioned above) have also shown high corresponding import structures for the product category concerned in all those three years.

(iv) Live animals: The African markets showed the strongest correspondence of imports for live animals, with South Africa, Zimbabwe, Lesotho, Mauritius and Nigeria on the lead (see Appendix: Table 2X.A (iv) & 2XB (iv)). This suggests that SADC have the best matching import structure for live animals. Other regional trading blocs in Africa that have shown a matching import structure for live animals, particularly in 1998, were Egypt, Morocco, Tunisia, Cameroon and Gabon. These markets point to COMESA, ECOWAS, Central and North Africa regional-trading blocs. Despite the fact that export-import similarity is not a static thing, the average COS-index of all selected-African market was 0.86 in both 1990 and 1998 (see Appendix: Table 2X.A (iv)). This suggests that the high export potential to this market has been constant for some time.

Following African markets were the European markets (with an average COS index of 0.74 in 1990 and 0.83 in 1998). The most attractive markets in this continent were UK, France, Belgium, Italy and Spain. The Asian markets were almost equally attractive (recording an average COS index of 0.80 in 1998), with the most favorable import structure for live animals featured in China, Korean Republic, Singapore and Malaysia.

(v) Grapes: The markets with the most favorable import structures for grapes in all three years (1990, 1994 and 1998) were Denmark, Italy, UK, Spain and the Netherlands (see Appendix: Table 2X.A (v) & 2XB (v)). This suggests that European markets had the best matching import structure for grapes during that period. Zambia,

Kenya, Morocco, Egypt, Cameroon, and Lesotho were the most attractive markets for grapes in Africa in those three years, on average. These were largely SADC, COMESA, Central and North Africa regional-trading blocs. An attractive import structure for grapes also featured in the Asian markets, especially in Indonesia, Singapore, Korea Republic, Malaysia, Japan and China. Thus, the world's biggest markets also showed high potentials of importing grapes from Namibia (see Appendix: Table 2X.A (v)). Moreover, from a close analysis of the COS-index for all products included in this study, it transpired that the export potential for grapes and live animals are probably the most attractive to all selected markets world-wide. For example, the average COS-index for grapes to the European, Asian and African markets in 1998 were all very attractive (at 0.93, 0.88 and 0.78, respectively). This would support the view that grape will be the second largest agricultural export product, next to beef and live animals in the near future (other things being equal).

(vi) Fish: Fish, like most sample commodities chosen in this study, could easily find the market in most sample markets (see Appendix: Table 2X.A (vi) & 2XB (vi)). Topping the list of the attractive markets are Gabon, Botswana, Brazil and Zimbabwe. Other African markets such as Egypt, Mauritius, Cameroon and Nigeria also showed a promising import structure for Namibia s fish exports. From a regional perspective, this points to SADC, ECOWAS and Central Africa. The average COS-index of all selected-African markets was at 0.65 (i.e. above the threshold) in 1996 and improved further to 0.77 in 1998 (see Appendix: Table 2X.A (vi)). However, the corresponding import structure of fish (to Namibia's export of the same commodity) points more to the European markets (particularly Italy, Sweden, UK, Germany, Belgium, Spain and Switzerland). The average COS-index for export potential to all selected-European market was above 0.70 in both years under review (i.e. 1994 and 1997). Spain, Namibia s traditional export market for fish maintained its attraction especially in 1997. Asian markets, particularly China, Singapore, and Japan are also promising.

It has been pointed out in section 5 that an effort was also made to roughly map out potential markets for additional important products. These are the products for which Namibia does not have any or adequate trade data to apply the export-import similarity techniques (as done with other products). The mappings of the potential markets for the additional products were done by simply gathering data on import values of these commodities in several major import countries/markets (Appendix: Table 3X.A and 3X.B). According to this data, Namibian food products (i.e. vegetables, fruits and other food products) and metals were, generally, in high demand in USA and European countries than elsewhere in the world, followed by Asian market; and least imported in the African market during the two years under review (i.e. 1994 and 1997). The most potential markets for food in Europe were Germany, Italy, Belgium-Luxembourg, France, United Kingdom and Spain; in Asia were Japan, China, Malaysia, Thailand and Singapore; and in Africa are Egypt, Nigeria, Morocco, South Africa and Botswana.

Metals and related products were largely imported in European and Asian markets on equal levels. The USA market have also shown a high level of imports for metals and/or related products. However, according to the data, virtually no imports for metals and/or related products entered the African markets (with exception of cements, which enters few African markets such as Algeria, Egypt, Nigeria and Ivory Coast in sizable values). This could be because most African countries are endowed with minerals - the prime source of metals and/or related products).

Although this study focuses on non-minerals, exclusively, a provision was made to include natural gas. This is because the prospect for gas exploration in Namibia has been ever increasing and a sizeable multiplier effect is foreseen from this and related activities. The markets that import a large amount (in terms of value) of natural gas in 1994 and 1997 were in Europe viz, Germany, Ukraine, Belux, France and Spain; in Asia were Japan, and

China. Both USA and Brazil also import a large amount of natural gas, while the African markets appear to be the least importers of this commodity.

In a nutshell, it follows from this analysis that beneficiaries of any effort to promote Namibian trade using the periods covered in this study as a reference, may follow the ranking appearing in the relevant tables at the appendix section.

It is acknowledged that this is a static analysis, as export-import similarity may change (and is, in fact meant to change) over time. However, since such changes cannot occur overnight, it is still useful to see to what extent, for particular period, the exports of Namibia matches the import structures of other countries because the extent of matching is also likely to be one of the determining factors of the intensity of trade between these countries and Namibia in subsequent years (Beers at al., 1991).

For many sample commodities included in this study, many markets showed a high degree of correspondence of imports to Namibia's exports.

It is also worth noting that, in most cases, the best fitting countries are not from the same continents or subregions. This implies the need to explore potential markets in as many other small and large markets as possible throughout the world. The possibility to export to these markets also implies that these products (including those included in this study) could successfully compete in these markets (i.e. in both developing and developedcountry markets), other things being equal<sup>11</sup>.

This study also realizes the importance of GDP in influencing trade flows. Thus, the import potential of a market due to better matching will surely be enhanced if the exporter's export structure corresponds well with the import structure of economically large economies. It is therefore encouraging to find that Namibia' export vectors matching highly with the import vectors of relatively big economies like USA, UK, Germany, China, Japan, Brazil, etc. (out side Africa) and South Africa, Nigeria, Egypt, etc (in Africa).

#### 5.3 LIMITATION

(i) the degree of similarity in the commodity composition of export and imports is only one of the factors determining the intensity of trade;

(ii) various ways of measuring the degree of similarity is conceivable;

(iii) the measure is essentially of static nature and reflect a situation of the past;

(iv) the measures are computed using the three-digit SITC commodity classification, but at this level of desegregation many commodities classes may still consist of quite different products;

(v) statistical recording of products may not be done consistently in all countries;

(vi) several important trading countries are not included in the sample, so that other regions like Latin America is under represented; and

(vii) some large countries are excluded

<sup>&</sup>lt;sup>11</sup> According to Osuntogun at al. (1997), this would hold more for products that have undergone some processing (i.e. manufacture products).

# 6. CONCLUSION AND POLICY RECOMMENDATIONS

This study attempted to estimate the trade potentials, particularly export potential to a number of markets worldwide by applying two different measures of trade correspondence, COS and EIS, for the years 1993, 1994, 1996 and 1998 trade data. This is a static analysis - so that export-import similarity may change (and is, in fact meant to change) over time.

The results obtained suggest that there is a great potential to export sample commodities (i.e. commodities included in this study) to many markets across the continents and sub-regions. However, USA and European markets showed the strongest commodity correspondence of imports for most sample commodities, followed by the Asian markets.

Although the import structure of the African markets for these commodities were, generally, the least attractive, some of these markets have also showed strong import potentials for some commodities. Thus, the argument that there is a large potential for increasing inter-developing country trade cannot be dismissed outright. However, this should be gauged against the view that the potential for a regional trade, particularly in developing countries could be too small and a similar belief that developing countries<sup>12</sup> have similar factor endowment and climatic conditions, which cause their production (and therefore their export) patterns to be, usually, too similar (and with only limited complementarities). These contrasting views justify a need for a study that will estimate the scope for African countries to substitute non-African imports with African imports (as suggested in a study mentioned elsewhere in this paper).

Nevertheless, the USA, European and the Asian markets showed the strongest commodity correspondence of imports for most sample, a clear case for South-North trade. Thus, both South-North and South-South trade, according to the results produced by the export-import similarity measure, have definite market potential for Namibian exports. This implies that the appropriate strategy to achieve maximum export potential suggested by these results would be to establish a well-devised trade connection between Namibia and most attractive markets across the world.

#### Policy recommendations

The finding of this study is that there is a potential to diversify non-mineral products to several non-traditional markets. This process can start with an attempt to produce some of (or all) sample products ('contained in this study) and export them to the potential markets (see appendix). This is, however, not straightforward as it may sound - necessitating some more recommendations as presented bellow.

Potential markets: It is noteworthy that although most of the time the best fitting countries are, generally, from the MDCs, there are also a number of cases where LDCs displayed similar fitting. This emphasize the need to link-up with all potential markets world-wide (see appendix). This should not overshadow the importance of regional markets and/or groupings. The merit for regional market is that it would provide an additional market, which could form a learning ground to increase both production and marketing efficiency before entry into the international market. In addition, LDCs could use a regional market as collective tool to bargain for rounds of trade liberalization with other regional blocks among more developed market. Thus, North-South trade and South-South trade are not necessarily in conflict and may to some extent supplement each other.

<sup>&</sup>lt;sup>12</sup> "South countries"- concept used in this study refers to developing countries.

Trade barriers: It is acknowledged that it might be difficult to penetrate a given market despite its attractive import potentials due to a variety of trade barriers. A lesson from responses of the newly industrialized countries to the formation of tariff and non-tariff regulation barriers is that (i) entering into joint ventures with multinationals would help to market one's exports into the countries where they are likely to be excluded; (ii) venturing in a more sophisticated product differentiation with new qualities, may render the product concerned exempted from some trade barriers; and (iii) it is possible to find ways to enter into new markets with less prohibitive barriers. All these could serve as useful guidelines to successfully adjust to a hostile international-trade environment. It is therefore important to stick to these strategies (as some of these have already been adopted in Namibia), and promote them aggressively to all the local stakeholders.

Development of agricultural products: Most of the potential products identified in this study are agricultural or related. This could mean that agro-based industries would be the most logical starting point. This necessitates this study to echo Ben Bardan's proposal that the Directorate of International Trade (of the Ministry of Trade and Industry) should set up a joint committee with the Ministry of Agriculture, Water and Rural Development, Agronomic Board and key stakeholders to coordinate and spearhead activities of (agricultural) product developments. It should, however, be noted that the act of product development requires a vast amount of relevant research undertakings. It is therefore recommended that the commissioning of supporting studies should be part of this process. These efforts may break the observed "comfort" of Namibian businessmen and women to trade with foreign produced goods rather than manufacturing locally for exports. The need to invest in human capital, especially in the development of productive and technical skills should not be overemphasized. These efforts are equally crucial in the development of processed goods (discussed below).

Development of processed goods (i) Agricultural-related goods: Most of the agricultural products are exported in an unprocessed form. There is therefore a large scope to process these products in many forms that would involve more local-value adding. For example, it has been established that the quantity of grape production reached the level of waste worth establishing a brand or wine producing plant. This line of thinking should be encouraged as this would be one way of diversifying the exports of new non-traditional exports and industrial products. Meanwhile, the authorities should double current effort of steering the development of various agricultural products for export. It emerged from this study that there are markets for a number of agricultural products and this should serve an additional motivation to do so. (ii) Metals and related products: Despite lack of data for metals (which prevented the application of export-import measure), some import data by different countries has been pooled. Most of the markets recorded substantial import figures for the sample products of this category. This could mean good market prospects for the products concerned. Being a mineral resourceful country, metals could form the core of resource-based industrialization (RBI) as has been the case in many minerals/hydrocarbon-producing economies like Brunei, Nigeria and Malaysia. It is therefore recommended that efforts should also be directed at exploring these products for exports.

**Quality control:** The establishment of quality control system is highly commended. However, these efforts will only bear fruit if the quality control rules and regulation is adhere to. It is therefore recommended that the relevant authorities should strictly monitor and inspect all quality control issues to enhance the expansion of exports, especially for fresh and processed food products.

**Lack of airfreight capacity and cool storage facilities:** With regard to inadequate airfreight capacity, several stakeholders have been contacted to give their perspective on this issue. It emerged that there is an acute need for improvement in this area of infrastructure.

**Concerning the lack of cool storage facilities:** this problem is experienced both at harbors and at airfields. The main problem At the harbor is that the current facilities are virtually conditioned for fish requirements only. There is therefore a need to make provision for other products' requirements. The inadequacy of these infrastructures forces some exporters of other products than fish (particularly fresh and processed food products) to chip their exports through South Africa (thereby using that country 's facilities). This costs Namibia a huge amount of loses in terms of lost fee charges for handling, long distance, etc.). The authorities and stakeholders should therefore look into this matter with agency.

**Lack of financial resources:** The most cited problematic area is the starting capital. The recent establishment of the general Credit Guarantee Scheme by the Ministry of Trade and Industry is a noble initiative and would partly address the problem. However, it may be worthwhile to consider a supplementary scheme to the former, but to be designed exclusively for exporters (and may therefore be referred to as Export Credit Guarantee Scheme or something in that line). This would cater a wide range of financial needs of exporters.

**Export-import statistics:** It has been indicated elsewhere in this paper that some export data has been generated from a mini-survey, which became necessary due to lack of comprehensive data on exports. There is therefore a need to look into the issue of comprehensiveness of the data.

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# 8. APPENDIX

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i) Beverages , , , , , , , , , , , , , , , , , , ,
ii) Skins, hide and wool _, , , , , , , , , , , , , , , , , , ,
iii) Meat and meat preparations ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
iv) Live Animals , , , , , , , , , , , , , , , , , , ,
v) Grapes and Raisins ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
vi) Fish , , , , , , , , , , , , , , , , , , ,
Table 2X. B. EIS Results
i) Beverages , , , , , , , , , , , , , , , , , , ,
ii) Skins, hide and wool _, , , , , , , , , , , , , , , , , , ,
iii) Meat and meat preparations ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
iv) Live Animals , , , , , , , , , , , , , , , , , , ,
v) Grapes and Raisins ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
vi) Fish , , , , , , , , , , , , , , , , , , ,
Table 3X. A. IMPORT DATA : Agricultural Products
i) Cotton , , , , , , , , , , , , , , , , , , ,
i) Cotton , , , , , , , , , , , , , , , , , , ,
i) Cotton , , , , , , , , , , , , , , , , , , ,
i) Cotton , , , , , , , , , , , , , , , , , , ,
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<ul> <li>i) Cotton , , , , , , , , , , , , , , , , , , ,</li></ul>
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i) Cotton
i) Cotton ,

# Table 1X.A. Degree of openness (Exports+Imports/GDP), 1990, 1994 and 1998

Country	1990	Country	1994	Country	1998
SADC		SADC		SADC	
Swaziland	1.33	Swaziland	1.53	Swaziland	1.43
Lesotho	1.18	Lesotho	1.24	Lesotho	1.34
Mauritius	1.03	Namibia	0.92	Mauritius	0.89
Namibia	0.99	Mauritius	0.90	Namibia	0.88
Botswana	0.98	Botswana	0.79	Botswana	0.83
Zambia	0.71	Zambia	0.62	Zimbabwe	0.63
Zimbabwe	0.37	Zimbabwe	0.55	Zambia	0.57
S. Africa	0.36	S. Africa	0.34	S. Africa	0.41
COMESA	0.00	COMESA	0.04	COMESA	0.41
Kenya	0.36	Kenya	0.46	Kenya	0.44
Egypt	0.33	Madagascar	0.33	Madagascar	0.31
Lgypt Madagascar	0.29	Egypt	0.33	Egypt	0.23
ECOWAS	0.29	ECOWAS	0.27	ECOWAS	0.25
Nigeria	0.65	Nigeria	0.67	lvory coast	0.62
ivory coast	0.65	lvory coast	0.67	Ghana	0.62
	0.44 0.36	Ghana	0.59		0.55
Ghana C.AFRICA	0.30		0.52	Nigeria	0.44
	0.55	C.AFRICA	0.75	C.AFRICA	0.50
Gabon	0.55	Gabon	0.75	Gabon	0.59
Cameroon	0.32	Cameroon	0.32	Cameroon	0.42
N. AFRICA	0.74	N. AFRICA	0.00	N. AFRICA	0.00
Tunisia	0.71	Tunisia	0.69	Tunisia	0.68
Morocco	0.41	Morocco	0.43	Morocco	0.47
ASIA		ASIA		ASIA	
Saudi Arabia	-	Saudi Arabia	-	Singapore	2.44
Singapore	2.97	Singapore	2.83	Malaysia	1.74
Japan	1.70	Malaysia	1.59	Indonesia	0.87
Malaysia	1.29	Thailand	0.65	Thailand	0.80
Thailand	0.61	Korea	0.50	Korea	0.69
Korea	0.51	Indonesia	0.42	Saudi Arabia	0.52
Indonesia	0.45	China	0.39	China	0.33
China	0.25	Japan	0.14	Japan	0.17
AMERICA		AMERICA		AMERICA	
Canada	0.43	Canada	0.57	Canada	0.73
United states	0.16	United states	0.17	United States	0.19
LATIN AMERICA		LATINN AMERIC		LATIN AMERICA	
Brazil	0.12	Brazil	0.14	Brazil	0.14
EUROPE (EEC)		EUROPE (EEC)		EUROPE (EEC)	
UK	1.28	Belgium	1.00	Spain	4.31
Belgium	1.14	UK	0.94	Belgium	1.20
Netherlands	0.88	Netherlands	0.82	Netherlands	0.85
Denmark	0.52	Denmark	0.52	Denmark	0.53
Germany	0.50	Germany	0.44	Germany	0.47
France	0.46	France	0.37	UK	0.43
Italy	0.31	Italy	0.35	France	0.40
Spain	0.24	Spain	0.34	Italy	0.38
EUROPE (EFTA)	0.2 1	EUROPE (EFTA		EUROPE (EFTA)	0.00
Switzerland	0.72	Norway	3.43	Switzerland	7.08
Sweden	0.61	Sweden	0.67	Sweden	0.67
Norway	0.58	Switzerland	0.63	Norway	0.67
Norway	0.00	Switzenanu	0.05	norway	0.55

Sources: World Development Indicators, African Developmment Bank (Selected statistics) - 1990-1998

SADC Lesotho Swaziland S. Africa					
Swaziland		SADC		SADC	
	0.104	Lesotho	0.141	Namibia	0.052
S. Africa	0.099	Namibia	0.029	Botswana	0.035
	0.018	Zambia	0.014	Mauritius	0.008
Namibia	0.012	Swaziland	0.010	Swaziland	-0.006
Botswana	-0.005	S. Africa	-0.002	S. Africa	-0.017
Zimbabwe	-0.016	Botswana	-0.054	Zimbabwe	-0.054
Zambia	-0.028	Zimbabwe	-0.062	Zambia	-0.080
Mauritius	-0.045	Mauritius	-0.066	Lesotho	-0.354
COMESA		COMESA		COMESA	
Egypt	0.004	Kenya	0.014	Kenya	-0.031
Kenya	-0.062	Egypt	0.001	Egypt	-0.031
Madagascar	-0.086	Madagascar	-0.093	Madagascar	-0.073
ECOWAS	0.000	ECOWAS	0.000	ECOWAS	0.010
Nigeria	0.175	lvory coast	-0.002	lvory coast	-0.018
Ghana	-0.038	Ghana	-0.047	Ghana	-0.047
Ivory Coast	-0.112	Nigeria	-0.090	Nigeria	-0.103
C.AFRICA	-0.112	C.AFRICA	-0.030	C.AFRICA	<b>1.000</b>
Gabon	0.028	Gabon	0.076	Cameroon	-0.029
Cameroon	-0.050	Cameroon	-0.007	Gabon	-0.029
N. AFRICA	-0.050		-0.007		-0.142
	0.000	N. AFRICA	0.004	N. AFRICA	0.000
Morocco	-0.008	Morocco	-0.024	Morocco	-0.006
Tunisia	-0.038	Tunisia	-0.034	Tunisia	-0.034
ASIA		ASIA		ASIA	0.000
Saudi Arabia	-	Saudi Arabia	-	Singapore	0.209
Japan	0.122	Singapore	0.165	Thailand	0.128
Singapore	0.083	China	0.014	Korea	0.126
China	0.032	Japan	0.003	Indonesia	0.042
Korea	-0.007	Korea	-0.010	Japan	0.032
Malaysia	-0.020	Indonesia	-0.016	China	0.031
Indonesia	-0.028	Thailand	-0.056	Saudi Arabia	-0.100
Thailand	-0.085	Malaysia	-0.064	Malaysia	
AMERICA		AMERICA		AMERICA	
United states	-0.017	United states	-0.018	Canada	-0.019
Canada	-0.039	Canada	-0.024	United States	-0.027
LATIN AMERICA		LATIN AMERIC	4	LATIN AMERICA	
Brazil	-0.009	Brazil	-0.002	Brazil	-0.043
EUROPE (EEC)		EUROPE (EEC)		EUROPE (EEC)	
Netherlands	0.032	Netherlands	0.056	Netherlands	0.052
Germany	0.032	BELUX	0.055	BELUX	0.049
BELUX	0.019	Denmark	0.022	France	0.028
Italy	0.016	Italy	0.013	Italy	0.017
Denmark	0.011	France	0.006	UK	0.000
France	-0.011	UK	-0.005	Germany	-0.002
Spain	-0.037	Germany	-0.010	Denmark	-0.014
UK	-0.105	Spain	-0.014	Spain	-0.029
EUROPE (EFTA)		EUROPE (EFTA		EUROPE (EFTA)	0.020
Norway	0.047	Switzerland	0.068	Switzerland	0.931
Switzerland	0.031	Norway	0.033	Sweden	0.020
Sweden	-0.035	Sweden	0.004	Norway	-0.015

## Table 1X.B. Degree of openness (Current Account/GDP), 1990, 1994 and 1998

Sources: World Development Indicators, African Developmment Bank (Selected statistics) - 1990-1998

### Table 2X.A. COS Results (i) Beverages

				Cosij - in	dex						
Ra	nk Country	1993	Ranl	Country	1994	Rank	Country	1996	Rank	Country	1998
1	Canada	1.00	1	Botswana	1.00	1	Gabon	1.00	1	Kenya	1.00
1	China	1.00	1	Brazil	1.00	1	Malysia	1.00	1	US	1.00
1	Lesotho	1.00	1	Japan	1.00	1	Morroco	1.00	2	Italy	0.99
1	Singapore	1.00	1	Morroco	1.00	1	Spain	1.00	3	Gabon	0.96
2	France	0.99	1	Spain	1.00	1	UK	1.00	3	Morroco	0.96
2	Germany	0.99	1	Sweden	1.00	2	China	0.99	3	Thailand	0.96
2	Nigeria	0.99	1	Tunisia	1.00	2	Italy	0.99	4	China	0.95
2	Zimbambwe	0.99	2	Malysia	0.99	2	US	0.99	4	Spain	0.95
3	Malysia	0.98	2	Saudi Arabia	0.99	3	Brazil	0.98	4	UK	0.95
3	Morroco	0.98	2	South Africa	0.99	3	Saudi Arabia	0.98	5	Brazil	0.94
4	Cameroon	0.97	2	UK	0.99	3	Sweden	0.98	5	Cameroon	0.94
4	Indonesia	0.97	3	Nigeria	0.98	3	Thailand	0.98	5	Saudi Arabia	0.94
4	Kenya	0.97	3	Switzerland	0.98	4	Kenya	0.96	6	South Africa	0.86
5	Japan	0.96	3	Zimbambwe	0.98	5	South Africa	0.95	7	Switzerland	0.84
5	Netherlands	0.96	4	Gabon	0.97	6	Tunisia	0.94	8	Malysia	0.83
6	Switzerland	0.93	4	Thailand	0.97	7	Japan	0.93	9	France	0.81
7	Gabon	0.92	4	US	0.97	7	Switzerland	0.93	10	Botswana	0.80
8	Denmark	0.89	5	France	0.95	8	France	0.92	11	Nigeria	0.78
9	Sweden	0.89	5	Italy	0.95	9	Nigeria	0.91	11	Sweden	0.78
9	Ghana	0.88	6	China	0.94	10	Botswana	0.89	12	Japan	0.71
9	Zambia	0.88	7	Singapore	0.89	10	Germany	0.89	12	Singapore	0.71
10	Belux	0.86	8	Lesotho	0.87	11	Zambia	0.83	13	Lesotho	0.63
10	Saudi Arabia	0.86	9	Cameroon	0.86	12	Singapore	0.82	14	Germany	0.61
10	Tunisia	0.86	9	Canada	0.86	13	Lesotho	0.81	15	Canada	0.57
11	Egypt	0.85	9	Zambia	0.86	14	Norway	0.77	16	Norway	0.55
	Spain	0.84	10	Netherlands	0.74	15	Denmark	0.70	17	Denmark	0.52
13	Korea Rep	0.83	11	Germany	0.73	16	Netherlands	0.62	18	Tunisia	0.48
13	Norway	0.83	12	Ghana	0.67	17	Ghana	0.57	19	Belux	0.34
14	UK	0.82	13	Denmark	0.64	18	Belux	0.56	20	Netherlands	0.33
15	Mauritius	0.81	13	Norway	0.64	18	Cameroon	0.56	21	Swaziland	0.32
16	Thailand	0.79	14	Kenya	0.59	19	Korea Rep	0.54	22	Cote divore	0.30
17	Botswana	0.78	15	Indonesia	0.58	20	Egypt	0.42	22	Ghana	0.30
18	South Africa	0.76	16	Belux	0.56	21	Mauritius	0.40	23	Zambia	0.14
18	Swaziland	0.76	17	Korea Rep	0.52	21	Zimbambwe	0.40	24	Korea Rep	0.12
	Italy	0.74		Egypt	0.50	22	Canada	0.39	25	Mauritius	0.11
	US	0.74		Mauritius	0.49	23	Indonesia	0.35	26	Zimbambwe	0.10
	Brazil	0.69	20	Swaziland	0.39	24	Swaziland	0.30	27	Indonesia	0.09
	Cote divore	0.45	21	Cote divore	0.38	25	Cote divore	0.28	28	Egypt	0.08

### Table 2X.A. COS Results (ii) Skins, hide and wool

			Co	sij - index				
Rank	Country	1990	Rank	Country	1994	Rank	Country	1998
1	Italy	1.00	1	Turkey	1.00	1	Turkey	0.99
1	Switzerland	1.00	2	Portugal	0.99	1	Portugal	0.99
2	Belgium	0.99	3	Netherlands	0.98	2	Saudi Arabia	0.94
2	China	0.99	4	Spain	0.88	3	Cameroon	0.90
2	Denmark	0.99	4	Thailand	0.88	3	Kenya	0.90
2	France	0.99	5	Switzerland	0.83	3	Malysia	0.90
2	Germany	0.99	6	Brazil	0.82	3	Singapore	0.90
2	Japan	0.99	7	Italy	0.77	3	Tunisia	0.90
2	Korea Rep	0.99	8	Canada	0.74	3	Zimbambwe	0.90
2	Malysia	0.99	8	Malysia	0.74	4	Brazil	0.79
2	Norway	0.99	8	UK	0.74	5	Switzerland	0.75
2	Sweden	0.99	9	Belgium	0.73	6	Spain	0.62
2	UK	0.99	9	China	0.73	7	Thailand	0.60
2	US	0.99	9	France	0.73	8	Nigeria	0.56
2	Turkey	0.99	9	Germany	0.73	9	Botswana	0.50
2	Portugal	0.99	9	Indonesia	0.73	9	Netherlands	0.50
3	Spain	0.98	9	Japan	0.73	10	Italy	0.48
4	Brazil	0.97	9	Korea Rep	0.73	11	Belgium	0.44
4	Canada	0.97	9	Norway	0.73	11	Germany	0.44
5	Netherlands	0.71	9	Sweden	0.73	12	China	0.43
6	Thailand	0.67	9	US	0.73	12	France	0.43
7	Cote divore	0.55	10	Botswana	0.60	12	Indonesia	0.43
7	Kenya	0.55	11	Cote divore	0.55	12	Japan	0.43
7	Mauritius	0.55	11	Kenya	0.55	12	Korea Rep	0.43
7	Nigeria	0.55	11	Nigeria	0.55	12	Norway	0.43
7	Swaziland	0.55	11	Swaziland	0.55	12	Sweden	0.43
7	Zimbambwe	0.55	11	Tunisia	0.55	12	US	0.43
8	Tunisia	0.51	11	Zimbambwe	0.55	13	South Africa	0.32
9	Morroco	0.35	12	Denmark	0.31	14	Canada	0.28
10	South Africa	0.25	13	Morroco	0.12	15	Morroco	0.23
11	Botswana	0.00	14	South Africa	0.01	16	UK	0.17
11	Cameroon	0.00	15	Cameroon	0.00	17	Swaziland	0.13
11	Egypt	0.00	15	Egypt	0.00	18	Denmark	0.08
11	Gabon	0.00	15	Gabon	0.00	19	Cote divore	0.00
11	Ghana	0.00	15	Ghana	0.00	19	Egypt	0.00
11	Indonesia	0.00	15	Lesotho	0.00	19	Gabon	0.00
11	Lesotho	0.00	15	Mauritius	0.00	19	Ghana	0.00
11	Saudi Arabia	0.00	15	Saudi Arabia	0.00	19	Lesotho	0.00

Cosij - index											
Rank	Country	1990	Rank	Country	1994	Rank	Country	1998			
1	Indonesia	1.00	1	Italy	1.00	1	Denmark	0.99			
1	Spain	1.00	1	Japan	1.00	1	UK	0.99			
2	Cameroon	0.99	2	Brazil	0.99	1	Zambia	0.99			
2	Japan	0.99	3	Cameroon	0.98	2	Kenya	0.97			
- 3	UK	0.98	4	Zambia	0.97	3	Malysia	0.96			
ļ	Denmark	0.96	5	UK	0.96	4	Korea Rep	0.95			
5	Brazil	0.92	6	Denmark	0.93	4	Netherlands	0.95			
6	Italy	0.85	7	South Africa	0.93	5	Italy	0.94			
7	Saudi Arabia	0.84	8	Spain	0.92	5	Spain	0.94			
3	Kenya	0.83	9	Netherlands	0.87	5	Sweden	0.94			
3	Lesotho	0.83	10	Lesotho	0.84	6	Brazil	0.93			
3	Malysia	0.83	10	Egypt	0.83	6	Saudi Arabia	0.93			
)	Egypt	0.81	11	Sweden	0.83	7	Canada	0.92			
9	Korea Rep	0.81	12	Korea Rep	0.82	7	Norway	0.92			
)	Morroco	0.81	12	Malysia	0.82	7	Singapore	0.92			
)	South Africa	0.81	12	Morroco	0.82	8	Germany	0.91			
)	Tunisia	0.81	12	Tunisia	0.82	9	France	0.89			
)	Zimbambwe	0.81	13	Kenya	0.81	10	Mauritius	0.88			
0	Norway	0.80	13	Singapore	0.81	11	Switzerland	0.88			
1	Sweden	0.79	14	Gabon	0.79	11	Zimbambwe	0.88			
2	Germany	0.78	15	Norway	0.77	12	Belux	0.87			
2	Netherlands	0.78	16	Canada	0.75	13	Indonesia	0.86			
12	Singapore	0.78	16	Germany	0.75	13	Swaziland	0.86			
3	Canada	0.77	17	Saudi Arabia	0.74	14	China	0.84			
13	Gabon	0.77	18	China	0.73	15	Botswana	0.83			
4	Belux	0.76	19	France	0.72	15	Gabon	0.83			
5	China	0.74	20	Belux	0.70	15	Japan	0.83			
6	France	0.73	21	Botswana	0.68	16	Thailand	0.82			
17	Switzerland	0.69	21	Switzerland	0.68	17	Cameroon	0.81			
8	Mauritius	0.68	22	Indonesia	0.67	17	US	0.81			
9	Thailand	0.65	22	Mauritius	0.67	18	South Africa	0.79			
20	US	0.61	23	Thailand	0.59	19	Cote divore	0.77			
21	Cote divore	0.54	23	US	0.59	20	Lesotho	0.64			
22	Botswana	0.00	24	Cote divore	0.50	21	Egypt	0.63			
22	Ghana	0.00	25	Zimbambwe	0.39	22	Ghana	0.61			
22	Nigeria	0.00	26	Ghana	0.00	22	Morroco	0.61			
22	Swaziland	0.00	26	Nigeria	0.00	22	Tunisia	0.61			
22	Zambia	0.00	26	Swaziland	0.00	23	Nigeria	0.00			

### Table 2X.A COS Results (v) Grapes and raisins

### Table 2X.A COS. Results (iv) Live Animals

				Cosij - ind	ex			
Rank	Country	1990	Rank	Country	1994	Rank	Country	1998
1	South Africa	1.00	1	Zimbabwe	1.00	1	Nigeria	1.00
2	Zimbabwe	1.00	2	Cote divore	0.99	1	Tunisia	1.00
2	China	0.99	2	Saudi Arabia	0.99	2	UK	0.99
2	Korea Rep	0.99	2	Swaziland	0.99	3	Denmark	0.98
2	Lesotho	0.99	2	US	0.99	4	Botswana	0.95
3	France	0.98	3	Nigeria	0.98	4	Mauritius	0.95
3	Nigeria	0.98	4	Singapore	0.96	5	Gabon	0.94
4	Spain	0.97	5	Lesotho	0.95	6	Cameroon	0.93
5	Cote divore	0.95	6	Mauritius	0.94	6	Egypt	0.93
6	Singapore	0.94	7	Botswana	0.93	6	France	0.93
7	Ghana	0.91	8	Korea Rep	0.92	6	Morroco	0.93
7	Swaziland	0.91	8	UK	0.92	6	Zambia	0.93
8	Egypt	0.87	9	France	0.91	6	Zimbabwe	0.93
9	Saudi Arabia	0.86	9	South Africa	0.91	7	Lesotho	0.92
10	Zambia	0.85	9	Tunisia	0.91	7	South Africa	0.92
11	Malysia	0.83	9	Egypt	0.90	8	China	0.85
12	Belgium	0.81	10	Cameroon	0.89	9	Korea Rep	0.83
13	Canada	0.80	10	Gabon	0.89	9	Malysia	0.83
13	Mauritius	0.80	10	Morroco	0.89	10	Thailand	0.81
14	Botswana	0.78	10	Zambia	0.89	11	Italy	0.80
14	Tunisia	0.78	11	China	0.86	11	Netherlands	0.80
15	Italy	0.76	12	Belgium	0.82	12	Brazil	0.79
15	Sweden	0.76	13	Malysia	0.82	12	Germany	0.79
16	Cameroon	0.75	13	Spain	0.82	12	Spain	0.79
16	Gabon	0.75	14	Sweden	0.81	13	Belgium	0.78
16	Morroco	0.75	15	Italy	0.80	14	Switzerland	0.77
17	UK	0.74	16	Germany	0.79	15	Canada	0.76
18	Brazil	0.73	17	Brazil	0.76	16	Indonesia	0.75
19	Switzerland	0.72	17	Canada	0.76	16	Japan	0.75
20	Denmark	0.70	17	Denmark	0.76	16	Norway	0.75
20	Indonesia	0.70	18	Netherlands	0.75	16	Singapore	0.75
20	Japan	0.70	18	Switzerland	0.75	16	Sweden	0.75
20	Netherlands	0.70	19	Indonesia	0.74	16	US	0.75
20	Thailand	0.70	19	Japan	0.74	17	Saudi Arabia	0.69
20	US	0.70	19	Norway	0.74	18	Cote divore	0.59
21	Kenya	0.66	19	Thailand	0.74	19	Swaziland	0.56
22	Germany	0.25	20	Ghana	0.45	20	Kenya	0.38
23	Norway	0.00	21	Kenya	0.00	21	Ghana	0.00

### Table 2X.A. COS Results (vi) Fish

		Cosij - i	ndex		
Rank	Country	1994	Rank	Country	1997
1	Gabon	0.95	1	Brazil	0.97
2	Botswana	0.94	2	Zimbambwe	0.94
3	UK	0.88	3	Netherlands	0.92
4	Sweden	0.87	4	Italy	0.91
5	Switzerland	0.86	5	China	0.90
6	Canada	0.85	6	Belgium	0.88
7	Italy	0.82	6	Denmark	0.88
8	Belgium	0.81	6	Mauritius	0.88
9	France	0.79	6	Singapore	0.88
10	Germany	0.77	6	Sweden	0.88
10	Mauritius	0.77	6	Zambia	0.88
11	Saudi Arabia	0.75	7	Canada	0.87
12	Tunisia	0.74	7	Germany	0.87
13	Egypt	0.73	8	Nigeria	0.86
14	US	0.72	8	Switzerland	0.86
15	Singapore	0.71	9	UK	0.85
16	Japan	0.70	10	Spain	0.84
17	Brazil	0.69	11	Japan	0.82
17	Netherlands	0.69	11	US	0.82
18	China	0.68	12	France	0.81
18	Zimbambwe	0.68	12	Ghana	0.81
19	Denmark	0.66	12	Malysia	0.81
19	Malysia	0.66	13	Egypt	0.80
20	Norway	0.65	14	Norway	0.79
20	Spain	0.65	14	Saudi Arabia	0.79
21	Cameroon	0.64	15	Cameroon	0.77
22	Nigeria	0.60	15	Korea Rep	0.77
23	Kenya	0.56	15	Morroco	0.77
23	Korea Rep	0.56	15	Thailand	0.77
23	Thailand	0.56	16	Cote divore	0.76
24	Cote divore	0.55	16	Kenya	0.76
24	Ghana	0.55	17	Gabon	0.63
25	South Africa	0.47	18	Botswana	0.55
26	Morroco	0.42	19	Tunisia	0.50
27	Zambia	0.41	20	South Africa	0.45
28	Indonesia	0.17	21	Indonesia	0.30
29	Lesotho	0.00	22	Lesotho	0.00
29	Swaziland	0.00	22	Swaziland	0.00

				Cosij - ind	ex			
Rank	Country	1990	Rank	Country	1994	Rank	Country	1998
1	Cote divore	1.00	1	Brazil	1.00	1	Brazil	1.00
1	Denmark	1.00	1	Egypt	1.00	1	Egypt	1.00
1	Egypt	1.00	1	Ghana	1.00	1	Indonesia	1.00
1	Ghana	1.00	1	Italy	1.00	1	Italy	1.00
1	Indonesia	1.00	1	Japan	1.00	1	Korea Rep	1.00
1	Italy	1.00	1	Korea Rep	1.00	1	Norway	1.00
1	Japan	1.00	1	Morroco	1.00	1	Tunisia	1.00
1	Korea Rep	1.00	1	Tunisia	1.00	2	Cote divore	0.99
1	Morroco	1.00	2	Swaziland	0.99	2	Thailand	0.99
1	Swaziland	1.00	3	Denmark	0.98	3	Denmark	0.98
1	Thailand	1.00	3	Gabon	0.98	3	Japan	0.98
2	Brazil	0.99	3	Indonesia	0.98	4	Malysia	0.97
2	Canada	0.99	3	Malysia	0.98	4	US	0.97
2	China	0.99	3	Thailand	0.98	5	Spain	0.96
2	Gabon	0.99	4	Canada	0.97	6	Gabon	0.95
2	South Africa	0.99	5	France	0.96	6	Ghana	0.95
2	Tunisia	0.99	5	Spain	0.96	7	Canada	0.91
3	Malysia	0.98	5	US	0.96	8	China	0.90
4	France	0.97	6	Cote divore	0.94	9	Netherlands	0.88
4	US	0.97	7	Norway	0.93	9	Swaziland	0.88
5	Germany	0.94	8	China	0.92	10	Morroco	0.87
6	Spain	0.93	9	Germany	0.90	11	France	0.86
7	Netherlands	0.90	9	Sweden	0.90	12	Sweden	0.83
8	Mauritius	0.86	10	Netherlands	0.89	13	Mauritius	0.81
9	Saudi Arabia	0.85	11	Mauritius	0.88	14	Germany	0.76
10	Norway	0.82	12	South Africa	0.80	15	Singapore	0.62
11	Sweden	0.77	13	Singapore	0.69	16	Switzerland	0.58
12	Nigeria	0.75	14	Switzerland	0.68	17	Saudi Arabia	0.55
12	Singapore	0.75	15	Belux	0.58	18	South Africa	0.54
13	Switzerland	0.69	16	UK	0.56	19	UK	0.50
14	UK	0.66	17	Saudi Arabia	0.49	20	Belux	0.42
15	Belux	0.65	18	Zambia	0.32	21	Nigeria	0.33
16	Cameroon	0.27	19	Nigeria	0.28	22	Zambia	0.27
17	Botswana	0.11	20	Cameroon	0.08	23	Botswana	0.18
17	Lesotho	0.11	21	Botswana	0.07	24	Cameroon	0.07
17	Zambia	0.11	22	Kenya	0.05	24	Lesotho	0.07
17	Zimbambwe	0.11	23	Zimbambwe	0.04	25	Kenya	0.06
18	Kenya	0.10	24	Lesotho	0.03	26	Zimbambwe	0.05

### Table 2X.A. COS Results (iii) Meat & meat preparations

### Table 2X.B. EIS Results (i) Beverages

ElSij - index											
Rank Country	1993	Rank	Country	1994	Ran	k Country	1996	Rank	Country	1998	
1 Mauritius	1.00	1	Saudi Arabia	0.78	1	Indonesia	0.90	1	Egypt	0.89	
2 Saudi Arabia	0.78	2	Swaziland	0.64	2	Egypt	0.89	2	Indonesia	0.85	
3 Swaziland	0.64	3	Egypt	0.53	3	Saudi Arabia	0.73	3	Saudi Arabia	0.71	
4 Lesotho	0.51	4	Lesotho	0.51	4	Swaziland	0.64	4	Italy	0.47	
5 Botswana	0.44	5	Indonesia	0.49	5	Brazil	0.51	5	Swaziland	0.44	
5 Italy	0.44	6	Italy	0.46	5	Lesotho	0.51	6	Kenya	0.39	
6 Nigeria	0.37	7	Zambia	0.40	6	Italy	0.47	7	Ghana	0.36	
7 Zambia	0.33	8	US	0.29	7	Zimbambwe	0.35	8	France	0.35	
8 US	0.28	9	Brazil	0.28	8	France	0.33	9	Zimbambwe	0.34	
9 France	0.25	9	France	0.28	9	China	0.32	10	China	0.33	
9 Indonesia	0.25	10	Botswana	0.27	10	US	0.30	11	Lesotho	0.31	
10 Spain	0.23	11	China	0.26	11	Ghana	0.24	11	US	0.31	
11 China	0.22	12	Ghana	0.22	11	Netherlands	0.24	12	Zambia	0.28	
11 Korea Rep	0.22	12	Spain	0.22	12	Nigeria	0.22	13	Canada	0.26	
12 Netherlands	0.21	13	Belux	0.21	13	Belux	0.21	14	Netherlands	0.25	
13 Cote divore	0.19	13	Gabon	0.21	14	Canada	0.20	15	Belux	0.24	
13 Ghana	0.19	13	Japan	0.21	15	Singapore	0.19	16	Singapore	0.21	
13 Switzerland	0.19	13	Netherlands	0.21	15	Spain	0.19	17	Malysia	0.19	
13 UK	0.19	14	Switzerland	0.20	16	Botswana	0.18	17	Morroco	0.19	
14 Gabon	0.18	15	Canada	0.19	16	Switzerland	0.18	18	Sweden	0.18	
14 Singapore	0.18	15	Germany	0.19	16	Zambia	0.18	19	Botswana	0.16	
15 Belux	0.17	16	UK	0.18	17	Gabon	0.17	19	Spain	0.16	
16 Germany	0.16	17	Zimbambwe	0.17	17	UK	0.17	19	UK	0.16	
17 Canada	0.15	18	Mauritius	0.15	18	Japan	0.15	20	Gabon	0.15	
18 Brazil	0.13	18	Norway	0.15	18	Sweden	0.15	21	Switzerland	0.14	
18 Egypt	0.13	18	Singapore	0.15	19	Germany	0.12	21	Tunisia	0.14	
18 Sweden	0.13	19	Morroco	0.14	19	Mauritius	0.12	22	Germany	0.12	
19 Japan	0.12	20	Sweden	0.12	20	Tunisia	0.11	22	Mauritius	0.12	
20 Norway	0.11	21	Nigeria	0.10	21	Malysia	0.10	22	Nigeria	0.12	
21 Morroco	0.10	22	Cote divore	0.08	21	South Africa	0.10	23	Brazil	0.10	
22 Zimbambwe	0.09	22	Korea Rep	0.08	22	Morroco	0.09	23	South Africa	0.10	
23 Malysia	0.08	22	Malysia	0.08	22		0.09	24	Korea Rep	0.09	
24 Tunisia	0.07	22	Tunisia	0.08	23	Korea Rep	0.07	25	Cote divore	0.06	
25 Denmark	0.04	23	Kenya	0.05	24	Cote divore	0.06	25	Norway	0.06	
26 Kenya	0.02	24	Denmark	0.04	25	Denmark	0.05	26	Denmark	0.04	
26 South Africa	0.02	24	South Africa	0.04	25	Kenya	0.05	27	Cameroon	0.03	
27 Cameroon	0.01	25	Cameroon	0.01	26	Cameroon	0.03	27	Japan	0.03	
28 Thailand	0.00	26	Thailand	0.00		Thailand	0.00	28	Thailand	0.01	

### Table 2X.B. EIS Results (ii) Skins, hide and wool

				E	isij - index			
Rank	Country	1990	Rank	Country	1994	Rank	Country	1998
1	Malysia	0.92	1	Malysia	0.57	1	Nigeria	0.69
2	Egypt	0.58	2	Cote divore	0.50	2	Egypt	0.64
3	Cote divore	0.50	2	Nigeria	0.50	3	France	0.43
3	Swaziland	0.50	2	Swaziland	0.50	4	Cameroon	0.40
4	Germany	0.47	3	Germany	0.47	4	Germany	0.40
4	Zimbambwe	0.47	4	France	0.44	4	Swaziland	0.40
5	Nigeria	0.43	5	Egypt	0.33	5	Zimbambwe	0.24
6	France	0.41	6	South Africa	0.24	6	US	0.22
7	Belux	0.39	7	UK	0.23	7	Saudi Arabia	0.21
8	UK	0.29	8	China	0.22	8	UK	0.17
8	US	0.29	8	Zimbambwe	0.22	9	China	0.16
9	Japan	0.18	9	Tunisia	0.21	10	Italy	0.14
10	Italy	0.15	9	US	0.21	11	Morroco	0.12
11	Tunisia	0.13	10	Botswana	0.20	12	Botswana	0.09
12	China	0.11	11	Mauritius	0.18	12	Spain	0.09
13	Spain	0.08	12	Belux	0.12	13	Thailand	0.08
14	South Africa	0.07	12	Japan	0.12	14	Belux	0.06
15	Morroco	0.06	12	Morroco	0.12	14	Japan	0.06
15	Norway	0.06	13	Italy	0.11	14	Netherlands	0.06
16	Brazil	0.04	14	Brazil	0.09	15	Tunisia	0.05
17	Korea Rep	0.03	14	Spain	0.09	16	Kenya	0.04
18	Netherlands	0.02	15	Saudi Arabia	0.08	16	South Africa	0.04
19	Canada	0.01	16	Korea Rep	0.04	17	Denmark	0.03
20	Botswana	0.00	17	Denmark	0.03	17	Malysia	0.03
20	Cameroon	0.00	18	Norway	0.02	18	Mauritius	0.02
20	Denmark	0.00	19	Indonesia	0.01	19	Brazil	0.01
20	Gabon	0.00	19	Kenya	0.01	20	Canada	0.01
20	Ghana	0.00	19	Netherlands	0.01	20	Ghana	0.01
20	Indonesia	0.00	19	Zambia	0.01	20	Korea Rep	0.01
20	Kenya	0.00	20	Cameroon	0.00	20	Norway	0.01
20	Lesotho	0.00	20	Canada	0.00	20	Zambia	0.01
20	Mauritius	0.00	20	Gabon	0.00	21	Cote divore	0.00
20	Saudi Arabia	0.00	20	Ghana	0.00	21	Gabon	0.00
20	Singapore	0.00	20	Lesotho	0.00	21	Indonesia	0.00
20	Sweden	0.00	20	Singapore	0.00	21	Lesotho	0.00
20	Switzerland	0.00	20	Sweden	0.00	21	Singapore	0.00
20	Thailand	0.00	20	Switzerland	0.00	21	Sweden	0.00
20	Zambia	0.00	20	Thailand	0.00	21	Switzerland	0.00

### Table 2X.B. EIS Results

(iii) Meat & meat preparations

ElSij - index										
Ran	k Country	1990	Rank	Country	1994	Rank	Country	1998		
1	Kenya	1.00	1	Swaziland	0.97	1	Morroco	1.00		
2	Tunisia	0.98	2	Morroco	0.93	1	Nigeria	1.00		
2	Zimbambwe	0.98	3	Tunisia	0.92	1	Zambia	1.00		
3	Cote divore	0.97	4	Egypt	0.89	2	Tunisia	0.99		
3	Swaziland	0.97	4	Malysia	0.89	3	Brazil	0.88		
4	Korea Rep	0.95	5	Mauritius	0.88	4	Kenya	0.87		
5	Brazil	0.94	5	Nigeria	0.88	4	Mauritius	0.87		
6	Morroco	0.93	6	Brazil	0.84	5	Egypt	0.84		
7	Thailand	0.91	6	Cameroon	0.84	6	US	0.79		
8	Malysia	0.89	6	Thailand	0.84	7	Botswana	0.78		
9	Canada	0.84	7	Canada	0.81	8	Malysia	0.77		
10	US	0.81	8	US	0.79	9	Canada	0.71		
11	Egypt	0.79	9	Korea Rep	0.78	9	Denmark	0.71		
11	Zambia	0.79	10	Germany	0.71	10	Swaziland	0.68		
12	Denmark	0.76	11	Denmark	0.70	11	Indonesia	0.66		
13	Mauritius	0.72	12	Sweden	0.68	12	Cote divore	0.63		
14	Indonesia	0.7	13	France	0.64	13	Sweden	0.61		
15	South Africa	0.69	13	Spain	0.64	14	Korea Rep	0.60		
16	Cameroon	0.66	14	South Africa	0.62	15	Netherlands	0.59		
17	Gabon	0.62	15	Cote divore	0.59	15	Norway	0.59		
18	Netherlands	0.59	15	Netherlands	0.59	16	Spain	0.58		
18	Sweden	0.59	16	Ghana	0.58	17	France	0.55		
19	France	0.58	17	Italy	0.56	18	Italv	0.53		
19	Italy	0.58	18	Gabon	0.54	19	Singapore	0.48		
20	Norway	0.51	19	Indonesia	0.53	19	Thailand	0.48		
20	Singapore	0.51	20	Botswana	0.51	20	UK	0.46		
20	Spain	0.51	20	UK	0.51	21	Japan	0.45		
20	UK	0.51	21	Singapore	0.49	21	Lesotho	0.45		
21	Ghana	0.5	22	Switzerland	0.45	22	Belux	0.43		
22	Japan	0.44	23	Japan	0.43	22	Switzerland	0.43		
23	Switzerland	0.43	24	Saudi Arabia	0.42	23	Gabon	0.40		
24	Germany	0.42	25	Belux	0.40	24	Ghana	0.38		
25	Belux	0.38	25	Zimbambwe	0.40	25	Saudi Arabia	0.36		
26	Lesotho	0.37	26	China	0.38	26	Zimbambwe	0.34		
27	Botswana	0.35	27	Lesotho	0.35	27	Germany	0.33		
27	China	0.35	28	Norway	0.34	28	South Africa	0.30		
28	Saudi Arabia	0.34	29	Zambia	0.29	29	China	0.27		
29	Nigeria	0.07	30	Kenya	0.15	30	Cameroon	0.18		

	ElSij - Index										
Ran	k Country	1990	Rank	Country	1994	Rank	Country	1998			
1	South Africa	0.98	1	Cote divore	1.00	1	Lesotho	1.00			
2	Cote divore	0.97	1	Lesotho	1.00	2	Nigeria	0.99			
3	Saudi Arabia	0.97	1	Swaziland	1.00	3	Cameroon	0.98			
4	Swaziland	0.96	2	Nigeria	0.99	3	Cote divore	0.98			
5	Lesotho	0.90	3	Saudi Arabia	0.95	3	Saudi Arabia	0.98			
6	US	0.85	4	Egypt	0.93	4	Indonesia	0.91			
7	Mauritius	0.80	5	Mauritius	0.91	5	Mauritius	0.89			
8	Netherlands	0.79	6	Brazil	0.89	6	Spain	0.84			
9	Gabon	0.76	7	US	0.88	7	Italy	0.82			
9	Tunisia	0.76	8	Morroco	0.85	8	Egypt	0.77			
10	Italy	0.75	9	Indonesia	0.81	8	Tunisia	0.77			
10	Morroco	0.75	10	Italy	0.80	9	Brazil	0.74			
11	Ghana	0.69	11	France	0.77	10	South Africa	0.69			
12	Spain	0.68	11	Netherlands	0.77	10	US	0.69			
13	Brazil	0.61	11	Spain	0.77	11	Malysia	0.67			
14	Cameroon	0.60	11	Zambia	0.77	12	France	0.66			
15	Nigeria	0.59	11	Zimbabwe	0.77	13	Gabon	0.58			
16	Germany	0.56	12	Gabon	0.76	13	Netherlands	0.58			
17	Thailand	0.53	13	South Africa	0.69	14	Canada	0.52			
18	Malysia	0.51	14	Malysia	0.58	15	Botswana	0.38			
19	France	0.50	15	Ghana	0.55	16	Morroco	0.32			
20	Indonesia	0.47	16	Canada	0.53	17	Belgium	0.31			
21	Egypt	0.38	17	Belgium	0.42	18	Zimbabwe	0.29			
22	UK	0.30	18	Thailand	0.41	19	Germany	0.22			
23	Japan	0.29	19	Germany	0.32	20	Switzerland	0.19			
24	Denmark	0.27	20	Tunisia	0.31	21	Japan	0.17			
25	Canada	0.23	21	Botswana	0.25	22	Zambia	0.14			
26	Botswana	0.20	21	Switzerland	0.25	23	Korea Rep	0.07			
27	Switzerland	0.15	22	UK	0.20	24	Kenya	0.06			
28	Belgium	0.12	23	Japan	0.17	25	China	0.05			
29	Kenya	0.07	23	Norway	0.17	26	Swaziland	0.04			
30	Zambia	0.06	24	Denmark	0.14	26	Thailand	0.04			
31	Zimbabwe	0.05	25	Korea Rep	0.13	27	Denmark	0.03			
32	Korea Rep	0.03	26	Sweden	0.03	27	UK	0.03			
33	Singapore	0.02	27	Cameroon	0.02	28	Singapore	0.01			
33	Sweden	0.02	27	Singapore	0.02	29	Ghana	0.00			
34	China	0.01	28	China	0.01	29	Norway	0.00			
35	Norway	0.00	29	Kenya	0.00	29	Sweden	0.00			

ElSij - index

### Table 2X.B. EIS Results (iv) Live Animals

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### Table 2X.B EIS Results

(v) Grapes and raisins

				EI	Sij - index			
Rank	Country	1990	Rank	Country	1994	Rank	Country	1998
1	Tunisia	0.72	1	Canada	0.25	1	Canada	0.25
2	Zimbambwe	0.61	2	UK	0.21	2	Brazil	0.24
3	Kenya	0.48	3	Mauritius	0.19	3	Zimbambwe	0.23
4	Italy	0.43	4	Norway	0.18	4	US	0.21
5	Canada	0.27	5	Brazil	0.17	5	Morroco	0.20
6	Mauritius	0.26	5	Netherlands	0.17	6	UK	0.19
7	Korea Rep	0.23	5	Singapore	0.17	7	China	0.18
8	US	0.22	5	US	0.17	7	Netherlands	0.18
9	UK	0.20	6	Denmark	0.16	7	Norway	0.18
10	Cameroon	0.19	7	China	0.15	8	Germany	0.16
10	Netherlands	0.19	7	Germany	0.15	8	Singapore	0.16
11	Indonesia	0.18	8	Cameroon	0.14	9	Denmark	0.15
12	Brazil	0.17	8	Malysia	0.14	9	Malysia	0.15
12	Norway	0.17	8	Zimbambwe	0.14	9	Mauritius	0.15
13	Denmark	0.16	9	Indonesia	0.12	9	Switzerland	0.15
13	Singapore	0.16	9	Sweden	0.12	9	Thailand	0.15
14	China	0.15	9	Switzerland	0.12	10	Cote divore	0.14
14	Germany	0.15	10	Belux	0.11	11	Kenya	0.13
15	Switzerland	0.14	11	France	0.10	12	France	0.12
16	Belux	0.12	12	Cote divore	0.09	13	Gabon	0.11
16	Malysia	0.12	12	Saudi Arabia	0.09	14	Belux	0.10
17	France	0.11	13	Egypt	0.08	14	Indonesia	0.10
17	Sweden	0.11	13	Gabon	0.08	14	South Africa	0.10
18	Cote divore	0.09	13	Thailand	0.08	14	Sweden	0.10
18	Gabon	0.09	13	Zambia	0.08	15	Saudi Arabia	0.09
18	Saudi Arabia	0.09	14	Botswana	0.07	16	Egypt	0.08
19	Japan	0.06	14	Korea Rep	0.07	16	Spain	0.08
19	Lesotho	0.06	14	Spain	0.07	17	Korea Rep	0.06
20	Spain	0.05	15	Japan	0.06	17	Swaziland	0.06
21	Thailand	0.03	15	Kenya	0.06	18	Botswana	0.05
22	Egypt	0.02	15	Tunisia	0.06	18	Italy	0.05
22	Morroco	0.02	16	Italy	0.05	18	Japan	0.05
22	South Africa	0.02	16	Lesotho	0.05	18	Lesotho	0.05
23	Botswana	0.00	16	Morroco	0.05	19	Zambia	0.02
23	Ghana	0.00	17	South Africa	0.03	20	Cameroon	0.01
23	Nigeria	0.00	18	Ghana	0	21	Ghana	0.01
23	Swaziland	0.00	18	Nigeria	0	21	Tunisia	0.01
23	Zambia	0.00	18	Swaziland	0	22	Nigeria	0

### Table 2X.B. EIS Results (vi) Fish

	ElSij - index						
Rank	Country	1994	Rank	Country	1997		
1	Cameroon	1.00	1	Cameroon	1.00		
1	Cote divore	1.00	1	Kenya	1.00		
1	Egypt	1.00	1	Nigeria	1.00		
1	Ghana	1.00	2	Cote divore	0.99		
1	Nigeria	1.00	2	Gabon	0.99		
2	Gabon	0.99	2	Tunisia	0.99		
2	Zambia	0.99	3	Brazil	0.98		
3	Brazil	0.98	4	Ghana	0.97		
4	Indonesia	0.97	4	Zambia	0.97		
4	Morroco	0.97	5	Egypt	0.95		
5	Zimbambwe	0.94	5	Morroco	0.95		
6	Tunisia	0.91	6	Botswana	0.94		
7	Mauritius	0.89	6	Saudi Arabia	0.94		
7	Saudi Arabia	0.89	7	Zimbambwe	0.93		
7	South Africa	0.89	8	Mauritius	0.90		
8	Botswana	0.87	9	Indonesia	0.89		
9	Norway	0.84	10	Norway	0.88		
9	Thailand	0.84	11	Germany	0.85		
10	Germany	0.83	12	South Africa	0.80		
11	Switzerland	0.78	12	UK	0.80		
12	Malysia	0.75	13	Malysia	0.79		
12	UK	0.75	14	Thailand	0.78		
13	Denmark	0.74	15	Denmark	0.77		
13	Netherlands	0.74	15	Switzerland	0.77		
14	Korea Rep	0.67	16	Sweden	0.75		
15	France	0.66	17	Netherlands	0.73		
15	Sweden	0.66	18	China	0.67		
16	Italy	0.64	19	Italy	0.65		
17	Canada	0.57	20	Korea Rep	0.64		
17	China	0.57	21	France	0.63		
18	Belgium	0.56	22	Belgium	0.57		
19	Japan	0.54	22	Japan	0.57		
19	Spain	0.54	22	Singapore	0.57		
20	Singapore	0.53	23	Canada	0.55		
21	Kenya	0.45	23	Spain	0.55		
22	US	0.41	24	US	0.44		
23	Lesotho	0.00	25	Lesotho	0.00		
23	Swaziland	0.00	25	Swaziland	0.00		

### Table 3X.A. Import data: Agricultural Products (i) Cotton

Imports - Val (1000\$)			
Country	1994	Country	1998
China	40,457	China	54,795
United Kingdom	11,234	United Kingdom	6,516
France	6,169	Singapore	6,039
Singapore	6,161	Botswana	4,404
Italy	5,210	Italy	3,551
Germany	4,473	Mauritius	3,404
Spain	4,046	France	3,341
Malaysia	2,558	Germany	3,152
Belgium-Luxembourg	2,431	Canada	2,687
South Africa	2,043	Malaysia	2,349
Denmark	1,752	Spain	1,060
Korea, Republic of	1,311	Denmark	1,018
Norway	841	Thailand	900
Botswana	556	Swaziland	846
Switzerland	466	Japan	826
Mauritius	456	Belgium-Luxembourg	814
Thailand	450	Indonesia	549
Canada	392	Morocco	415
Netherlands	282	Saudi Arabia	336
Sweden	248	Netherlands	326
Japan	225	Nigeria	316
Saudi Arabia	117	Switzerland	246
United States of America	77	Zimbabwe	220
Brazil	75	Sweden	213
Morocco	52	Norway	185
Tunisia	39	Brazil	113
Indonesia	23	Korea, Republic of	113
Gabon	5	United States of America	81
Cameroon	3	Tunisia	35
Zambia	2	South Africa	27
Kenya	0	Cameroon	5
Nigeria	0	Gabon	5
Swaziland	0	Kenya	4
Zimbabwe	0	Zambia	1

Country	1994	Country	1998
_		_	
France	41,828	France	48,767
United Kingdom	16,918	United Kingdom	17,040
Italy	15,218	Italy	16,767
China	11,597	Germany	12,942
Germany	11,136	Spain	11,268
Canada	10,008	China	8,775
Malaysia	7,070	Canada	8,378
Spain	6,712	Malaysia	8,216
United States of America	6,554	Netherlands	6,957
Switzerland	6,470	Switzerland	5,765
Belgium-Luxembourg	5,555	Belgium-Luxembourg	4,747
Singapore	5,107	United States of America	4,199
Netherlands	3,878	Morocco	2,647
Indonesia	2,647	Indonesia	2,486
Denmark	1,910	Denmark	2,424
Morocco	1,586	Singapore	2,360
Kenya	1,584	Sweden	1,613
South Africa	1,164	South Africa	864
Sweden	1,079	Brazil	813
Brazil	706	Norway	728
Japan	667	Japan	417
Norway	524	Kenya	318
Egypt	419	Mauritius	187
Tunisia	179	Egypt	105
Botswana	42	Tunisia	93
Mauritius	37	Saudi Arabia	54
C te d'Ivoire	25	C te d'Ivoire	38
Korea, Republic of	23	Swaziland	28
Gabon	11	Botswana	22
Zimbabwe	8	Thailand	19
Cameroon	3	Gabon	8
Thailand	3	Zambia	6
Ghana	0	Zimbabwe	6
Saudi Arabia	0	Cameroon	5
Swaziland	0	Ghana	3
Zambia	0	Korea, Republic of	0

### Table 3X.A. Import data: Agricultural Products (ii) Dates

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## Table 3X.A. Import data: Agricultural Products (iii) Tobacco

Imports - Val (1000\$)				
Country	1994	Country	1998	
Japan	2,604,114	Japan	2,432,542	
China	1,884,634	France	1,714,705	
France	1,434,325	Germany	1,424,745	
Germany	1,245,310	Italy	1,315,654	
Italy	1,118,365	United States of America	1,304,111	
United States of America	907,092	China	1,294,275	
Singapore	895,909	Singapore	957,309	
Netherlands	884,461	Netherlands	890,028	
United Kingdom	685,778	United Kingdom	786,214	
Spain	569,025	Spain	707,097	
Belgium-Luxembourg	428,836	Belgium-Luxembourg	576,575	
Korea, Republic of	245,244	Egypt	220,495	
Switzerland	201,868	Switzerland	203,421	
Egypt	143,733	Saudi Arabia	177,524	
Sweden	129,800	Korea, Republic of	166,275	
ndonesia	125,299	Denmark	124,584	
Saudi Arabia	107,018	Sweden	102,173	
Denmark	100,738	Thailand	98,961	
Thailand	91,905	Malaysia	98,014	
Morocco	90,130	Canada	84,591	
Norway	63,594	Indonesia	84,474	
Malaysia	63,579	South Africa	80,547	
South Africa	58,607	Brazil	78,050	
Canada	51,586	Tunisia	66,970	
Tunisia	47,490	Morocco	64,446	
Brazil	35,480	Norway	61,849	
Botswana	23,319	Zimbabwe	25,620	
Nigeria	10,676	Botswana	17,296	
Cameroon	8,940	Nigeria	14,175	
Lesotho	8,600	C te d'Ivoire	13,317	
C te d'Ivoire	8,282	Lesotho	8,600	
Kenya	4,745	Cameroon	7,479	
Gabon	3,882	Gabon	6,973	
Swaziland	2,210	Swaziland	2,494	
Ghana	2,090	Kenya	1,975	
Vauritius	1,306	Mauritius	1,581	
Zambia	1,161	Zambia	864	
Zimbabwe	915	Ghana	618	

Imports - Val (1000\$)				
Country	1994	Country	1998	
Japan	30,676	Japan	17,565	
Netherlands	2,852	Belgium-Luxembourg	3,251	
Belgium-Luxembourg	1,507	Netherlands	2,064	
China	827	Germany	834	
Germany	610	France	792	
United States of America	541	United Kingdom	709	
France	405	China	635	
United Kingdom	357	United States of America	453	
Spain	176	Spain	316	
Denmark	107	Canada	219	
Italy	106	Switzerland	138	
Canada	102	Malaysia	105	
Switzerland	39	Denmark	70	
Malaysia	34	Singapore	64	
Zambia	10	Italy	37	
Botswana	7	Saudi Arabia	35	
Indonesia	6	Korea, Republic of	33	
Sweden	5	Botswana	19	
South Africa	4	Sweden	16	
Brazil	0	Swaziland	14	
Korea, Republic of	0	Norway	8	
Norway	0	Brazil	3	
Saudi Arabia	0	South Africa	1	
Singapore	0	Indonesia	C	
Swaziland	0	Zambia	C	

## Table 3X.A. Import data: Agricultural Products (iv) Sunflower seed

## Table 3X.A. Import data: Agricultural Products (v) Dairy products

Imports - Val (1000\$)				
Country	1994	Country	1998	
Germany	3,310,004	Germany	3,339,807	
Italy	2,810,814	Italy	2,753,816	
Netherlands	2,107,472	Belgium-Luxembourg	2,126,592	
Belgium-Luxembourg	1,939,245	France	2,075,489	
France	1,822,377	Netherlands	1,767,882	
United Kingdom	1,477,843	United Kingdom	1,708,103	
Spain	814,590	United States of America	941,522	
China	782,409	Spain	837,610	
United States of America	620,443	China	808,575	
Japan	615,670	Japan	761,450	
Brazil	272,414	Brazil	514,520	
Malaysia	270,048	Saudi Arabia	455,832	
Switzerland	269,568	Thailand	281,936	
Singapore	262,151	Switzerland	271,395	
Thailand	247,414	Singapore	253,303	
Canada	176,290	Malaysia	250,744	
Saudi Arabia	174,708	Canada	237,408	
Denmark	153,344	Nigeria	218,268	
Egypt	146,004	Denmark	215,344	
Indonesia	122,890	Sweden	180,554	
Sweden	115,304	Egypt	151,428	
Morocco	83,684	Indonesia	113,734	
Korea, Republic of	74,942	Korea, Republic of	85,542	
Tunisia	45,912	Morocco	67,397	
Nigeria	43,530	C te d'Ivoire	52,463	
Mauritius	42,546	Mauritius	42,182	
Botswana	29,114	Botswana	36,551	
C te d'Ivoire	27,686	Tunisia	24,681	
South Africa	20,418	Norway	22,735	
Norway	16,969	South Africa	22,696	
Swaziland	10,822	Ghana	17,524	
Gabon	10,355	Swaziland	16,419	
Cameroon	8,201	Gabon	14,259	
Ghana	7,130	Cameroon	13,405	
Lesotho	5,250	Kenya	9,113	
Kenya	4,313	Lesotho	5,350	
Zambia	1,775	Zimbabwe	3,822	
Zimbabwe	854	Zambia	2,002	

	Impor	Imports - Val (1000\$)		
Country	1994	Country	1998	
China	42,937	China	18,057	
Saudi Arabia	3,199	Egypt	6,217	
Morocco	1,078	Saudi Arabia	3,360	
Malaysia	697	Morocco	654	
Indonesia	311	Malaysia	491	
Egypt	269	Thailand	28	
Thailand	103	Indonesia	(	

# Table 3X.A. Import data: Agricultural Products (vi) Sweet melon

## Table 3X.A. Import data: Agricultural Products (vii) Prepared groundnuts

Imports - Val (1000\$)			
Country	1994	Country	1998
Japan	80,043	Japan	68,941
France	52,498	France	45,280
Germany	22,397	Germany	19,497
Singapore	18,827	Korea, Republic of	13,386
Italy	14,287	United States of America	12,286
United Kingdom	13,366	Italy	11,123
Sweden	12,698	Sweden	8,450
China	7,697	Singapore	8,120
Switzerland	7,602	Switzerland	7,910
Belgium-Luxembourg	6,758	Belgium-Luxembourg	7,241
Netherlands	5,315	United Kingdom	6,051
Denmark	4,016	Netherlands	5,357
Spain	3,704	China	5,147
Norway	2,786	Spain	4,405
Canada	2,577	Saudi Arabia	3,867
United States of America	2,095	Canada	3,810
Malaysia	920	Norway	3,089
Botswana	743	Denmark	2,976
Brazil	521	Brazil	1,952
Saudi Arabia	487	Malaysia	1,005
Thailand	228	Botswana	606
South Africa	203	Thailand	326
Mauritius	138	Indonesia	171
Morocco	65	Morocco	158
Indonesia	54	South Africa	150
Zimbabwe	25	Swaziland	146
Zambia	4	Mauritius	82
Gabon	2	Ghana	51
Ghana	0	Gabon	4
Korea, Republic of	0	Zambia	1
Swaziland	0	Zimbabwe	1

# Table 3X.A. Import data: Agricultural Products (viii) Tomatoes

Imports - Val (1000\$)				
Country	1994	Country	1998	
Germany	601,885	United States of America	872,79	
United States of America	385,381	Germany	635,894	
France	285,095	United Kingdom	315,16	
United Kingdom	256,945	France	299,47	
Netherlands	226,704	Netherlands	257,07	
Canada	110,609	Canada	135,51	
Sweden	59,509	Saudi Arabia	77,140	
Switzerland	58,429	Sweden	71,60	
Italy	46,118	Belgium-Luxembourg	50,864	
Saudi Arabia	36,523	Switzerland	41,16	
Belgium-Luxembourg	25,103	Italy	36,55	
Denmark	16,268	Denmark	21,78	
Norway	14,099	Norway	17,25	
Spain	8,463	Japan	11,17	
China	6,768	Singapore	8,223	
Singapore	5,269	China	3,67	
Botswana	2,198	Spain	3,38	
Lesotho	1,500	Botswana	2,604	
Malaysia	1,147	Lesotho	1,60	
Japan	996	Malaysia	1,298	
Brazil	449	Brazil	363	
Indonesia	210	Zimbabwe	29	
Swaziland	125	Swaziland	20	
Gabon	33	Gabon	20	
South Africa	27	South Africa	149	
Zambia	10	Nigeria	140	
Tunisia	3	Indonesia	114	
Cameroon	1	Zambia	50	
C te d'Ivoire	0	Kenya	33	
Egypt	0	Egypt	24	
Kenya	0	C te d'Ivoire	20	
Nigeria	0	Thailand	:	
Thailand	0	Cameroon		
Zimbabwe	0	Tunisia		

Sweden

Norway

Botswana

Indonesia

Denmark

Spain

Thailand

Ghana

Gabon

Zambia

South Africa

Brazil

Belgium-Luxembourg

Korea, Republic of

1998

10,259

5,270 5,180 3,697 3,252 1,238 881 739 605 560 522 212 196

160

136

51

27

22

21

21

16

10

6

5

3

0

0

	Imports - Val (1000\$)		
Country	1994	Country	
Belgium-Luxembourg	41,735	Canada	
Italy	18,594	United States of America	
Netherlands	8,161	United Kingdom	
France	8,144	France	
Canada	8,018	Italy	
Germany	4,204	Japan	
United Kingdom	2,652	Netherlands	
United States of America	2,337	China	
Denmark	891	Malaysia	
Singapore	560	Germany	
China	545	Singapore	
Malaysia	293	Switzerland	
Saudi Arabia	199	Saudi Arabia	

149

135

80

54

30

13

12

4

4

1

0

0

0

0

### Table 3X.A. Import data: Agricultural Products (ix) Sweet potatoes

Source: FAO Trade Year Books (1990-1997)

Japan

Switzerland

South Africa

Korea, Republic of

Botswana

Sweden

Norway

Indonesia

Spain

Brazil

Gabon

Ghana

Thailand

Zambia

Imports - Val (1000\$)				
Country	1994	Country	1998	
Japan	1,440,051	Indonesia	861,123	
Brazil	323,429	Brazil	545,370	
China	321,935	Saudi Arabia	500,739	
United Kingdom	234,755	China	312,200	
Saudi Arabia	228,591	Japan	272,565	
France	213,782	United Kingdom	258,090	
Netherlands	190,322	France	239,060	
Germany	168,267	Malaysia	232,277	
Indonesia	157,323	Nigeria	223,524	
United States of America	150,071	United States of America	203,045	
South Africa	127,280	South Africa	150,805	
Belgium-Luxembourg	117,468	Germany	149,380	
Spain	115,096	Singapore	121,412	
Malaysia	112,348	Canada	119,339	
Singapore	108,562	Netherlands	119,172	
Nigeria	100,000	C te d'Ivoire	116,000	
Canada	81,649	Belgium-Luxembourg	115,687	
C te d'Ivoire	75,839	Spain	40,436	
Ghana	54,730	Italy	34,397	
Sweden	52,165	Sweden	33,470	
Cameroon	36,653	Switzerland	25,739	
Italy	26,561	Ghana	24,402	
Switzerland	24,177	Denmark	22,555	
Mauritius	22,250	Korea, Republic of	21,675	
Kenya	22,246	Mauritius	21,239	
Denmark	18,639	Cameroon	19,052	
Botswana	9,992	Kenya	17,419	
Norway	9,139	Botswana	16,585	
Gabon	8,270	Zimbabwe	15,791	
Zimbabwe	7,072	Norway	11,388	
Tunisia	5,508	Gabon	5,400	
Swaziland	4,387	Swaziland	5,206	
Zambia	3,312	Tunisia	3,773	
Lesotho	1,200	Zambia	2,570	
Morocco	510	Lesotho	1,200	
Korea, Republic of	450	Morocco	1,151	
Egypt	182	Thailand	562	
Thailand	0	Egypt	276	

### Table 3X.A. Import data: Agricultural Products (x) Rice

### Table 3X.A. Import data: Agricultural Products (xi) Potatoes

Г

Country	1994	Country	1998
Germany	233,362	Germany	181,039
United Kingdom	137,503	United Kingdom	177,666
Netherlands	136,743	Belgium-Luxembourg	146,715
Belgium-Luxembourg	131,802	Spain	139,123
Spain	130,418	Netherlands	126,911
Italy	126,253	United States of America	106,867
France	114,924	Italy	101,873
Canada	70,853	France	94,616
United States of America	70,497	Canada	65,981
Brazil	30,464	Egypt	23,405
Saudi Arabia	23,343	Tunisia	21,870
Morocco	20,627	Malaysia	18,431
Egypt	18,483	Brazil	16,406
Denmark	16,526	Denmark	14,613
Sweden	13,787	Morocco	14,281
Malaysia	13,718	Norway	10,762
Norway	13,310	Saudi Arabia	9,428
Tunisia	12,552	Sweden	9,107
Switzerland	11,283	Singapore	8,938
Singapore	9,038	Switzerland	8,817
China	4,433	China	7.099
Botswana	3,316	Botswana	3,781
Mauritius	2,107	Mauritius	3,512
Lesotho	2,100	C te d'Ivoire	3,300
Swaziland	1,300	Thailand	3,156
Indonesia	1,037	Korea, Republic of	2,379
Thailand	1,035	Lesotho	2,200
C te d'Ivoire	1,031	Swaziland	1,890
Korea, Republic of	354	Zambia	900
South Africa	306	Indonesia	607
Zambia	219	Gabon	500
Gabon	208	Ghana	159
Ghana	170	Zimbabwe	54
Japan	30	Kenya	48
Zimbabwe	13	South Africa	11
Kenya	8	Cameroon	7
Cameroon	0	Nigeria	
Nigeria	0	Japan	(

Imports - Val (1000\$)			
Country	1994	Country	1998
Japan	9,418	Japan	12,210
USA	5,678	Germany	8,422
Germany	5,542	USA	7,459
Ukraine	4,116	Ukraine	5,401
France	3,302	France	4,045
Korea	1,562	Korea	2,787
Belux	1,232	Belux	1,929
Spain	858	China	1,209
Turkey	629	Spain	1,186
Nethelands	576	Nethelands	1,053
Austria	470	Austria	700
U.K	465	Poland	695.8
Poland	351	Italy	690.6
Switzland	337	Brazil	613.3
China	329	Mexico	602
Italy	322	Turkey	566
Finland	312	Switzland	400
Mexico	271	Finland	385.5
Brazil	260.3	U.K	287
Tunisia	142.5	Sweden	267
Canada	140.5	Canada	210.2
Russia	129.7	Portugal	189.7
Sweden	125.1	Morroco	163.3
Portugal	111	Malaysia	152
Morroco	109.3	Russia	117
Argentina	92.3	Tunisia	109.9
Malaysia	85	Argentina	73.4

### Table 3X.B. Import data: Matals and/or Related Products (i) Gas

Imports - Val (1000\$)			
Country	1994	Country	1998
Germany	1223	USA	1799
USA	1142	Germany	1021
Japan	749	Japan	899
China	523	China	790
Nethelands	419	Singapore	454
France	372	France	45
Singapore	297	Kuwait	405
U.K	236	Nethelands	382
Saudi Arabia	205	Malaysia	345
Belgium	200	Korea	314
Switzland	184	U.K	292
Austria	178	Spain	258
Korea	178	Belgium	21
Italy	170	Austria	188
Israel	154	Switzland	169
Kuwait	153	Israel	163
United Arab	152	Saudi Arabia	159
Spain	142	United Arab	159
Canada	120	Italy	137
Algeria	119	Canada	133
Malaysia	101	Russia	112
Russia	96	Indonesia	109
Sweden	62	Denmark	108
Denmark	60	Egypt	96
Indonesia	60	Algeria	95
Ireland	45	Brazil	76
Ivory Coast	36	Ireland	7
Brazil	29	Ivory Coast	57
Egypt	18	Sweden	48

### Table 3X.B. Import data: Matals and/or Related Products (ii) Cement

Imports - Val (1000\$)			
Country	1994	Country	1998
USA	650	USA	837
Germany	405	Germany	399
China	286	China	352
France	242	U.K	301
U.K	239	France	284
Italy	184	Italy	216
Canada	151	Canada	172
Japan	138	Japan	170
Spain	124	Spain	141
Netherland	103	Singapore	130
United Arab	72	Neterland	115
Belgium	68	United Arab	100
Austria	55	Belgium	77
Denmark	49	Argentina	74
Singapore	48	Switz	70
Greece	45	Denmark	66
Argentina	44	Austria	65
Russian	30	Mexico	61
Korea	29	Sweden	51
Norway	28	Greece	49
Sweden	26	Brazil	47
S.African	26	Korea	45
Ireland	24	Russian	43
Portugal	23	Norway	38
Israel	23	S.African	38
Switzerland	22	Ireland	33
S.Arabia	22	Israel	30
Malaysia	16	S.Arabia	24
Thailand	14	Portugal	23
Mexico	13	Malaysia	23
Brazil	8	Thailand	16

### Table 3X.B. Import data: Matals and/or Related Products (iii) Cutlery

### Table 3X.B. Import data: Matals and/or Related Products (iv) Steel and Copper Nails

Imports - Val (1000\$)			
Country	1994	Country	1998
USA	2081	USA	2387
Germany	864	Germany	1078
Canada	588	Canada	796
France	553	Mexico	782
U.K	475	U.K	654
Mexico	397	France	623
Thailand	306	China	360
Belgium	261	Nethelands	332
Nethelands	256	Belgium	328
China	239	Spain	316
Spain	237	Japan	304
Austria	218	Thailand	272
Sweden	217	Austria	260
Singapore	212	Sweden	244
Switzland	202	Switzland	210
Malaysia	183	Brazil	187
Japan	181	Italy	179
Italy	174	Malaysia	163
Denmark	91	Denmark	126
Korea Republic	81	Turkey	108
Norway	76	Korea Republic	99
Brazil	75	Norway	97
So African	60	Argentine	93
Indonesia	52	Indonesia	91
Argentine	51	United Arab	90
Turkey	47	So African	84
Ireland	40	Ireland	67
Portugal	39	Saudi Arabia	64
Saudi Arabia	38	Singapore	62
Russia	33	Portugal	60
United Arab	32	Russia	36

Imports - Val (1000\$)			
Country	1994	Country	1998
Nethelands	727	Germany	484
Germany	460	Usa	479
France	365	France	382
USA	342	UK	374
UK	317	Nethelands	367
China	237	Belgium	335
Belux	201	Canada	308
Canada	146	China	201
Russian	129	Austria	182
Denmark	116	Spain	167
Japan	111	Japan	152
Spain	111	Russian	140
Switzerland	111	Denmark	139
Mexico	109	Korea	129
Austria	104	Switzerland	111
Korea	101	Singapore	98
Argentine	89	Mexico	91
Singapore	79	Malaysia	91
Thailand	76	Brazil	88
Italy	74	Ireland	83
Sweden	63	Italy	76
Brazil	62	Argentine	76
Norway	59	Sweden	75
Ireland	58	Indonesia	70
Indonesia	55	Norway	68
Portugal	51	Portugal	54
Argentine	47	Thailand	54
Malaysia	42	S. Arabia	47
United Arab	41	Greece	41
Greece	37	United Arab	30
S. Arabia	34	Argentine	18

### Table 3X.B. Import data: Matals and/or Related Products (v) Metal tanks