

CASE STUDY

THE INDIAN OCEAN ISLANDS

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FOREWORD

I would like to express my deep appreciation and thanks to all the people I met during my missions to Geneva and Mauritius (see annex I) for their valuable contributions in the preparation of this report. In particular, I wish to thank Ambassador J. Meetoo, Geo Govinden, Usha Dwarka-Canabady, J.-C. Montocchio, Dr Rajpati, Jean-Noël Humbert, Jean-Cyril Monty and M. Hardy, for their dedication, kindness and hospitality. A word for G. Vydelingum, principal statistician at the Central Statistical Office, Government of Mauritius, who was very helpful in providing all statistics requested. UNCTAD staff were very efficient, both in the practical and in the analytical aspects of the work, particularly M. Shirotori, O. Matringe, M. Arda, S. Laird and B. Graham. As always about issues relating to the Indian Ocean and SIDSs (but not only these), Ph. Hein was an immense source of ideas and energy. Last, but not least, I wish to thank the staff of the Indian Ocean Commission (IOC) secretariat, especially Erik Van Overstraeten, Raj Mohabeer and Soifiat Alfeine, who were extremely helpful and friendly, as always.

This report aims at providing an analysis of the main agricultural interests of Indian Ocean SIDSs and their perspective in the context of the ongoing agriculture negotiations at the World Trade Organization (WTO). However, due to constraints in obtaining data, the analysis focuses mainly on Mauritius; the Comoros and Seychelles are examined in less detail. This is indeed regrettable, as I have a deep feeling of friendliness towards the people from these smaller islands. I am grateful for the invaluable assistance provided by Mohamed Bacar Dossar, Marie Ange de Lespinois, Saïd Mdziani, Hamadi Idaroussi, and Antoine Marie Moustache so that these countries could finally be included in the study.

The exchange rates used throughout this report, unless otherwise stated, are the ones prevailing at the time of the field mission: 25 Mauritian rupees = 1 euro, and 30 Mauritian rupees = 1 US\$; 1 Comorian franc (CF) = 0.00198 euros in 1999, and 5.5 Seychelles rupees (SR) = 1 US\$.

I remain responsible for any mistakes or misinterpretation occurring in this analysis.

J.-M. Salmon

EXECUTIVE SUMMARY

The Indian Ocean country case study provides good examples of the special characteristics of SIDSs and their particular dependence on preferential trade arrangements and agreements. Seychelles, the Comoros and Mauritius are all small and remote economies. The combination of smallness and remoteness prevents them from successfully pursuing the two traditionally suggested development strategy (export-led growth or import-substitution). The former is hampered by high transport costs and the latter by diseconomies of scale. Besides, Mauritius also regularly suffers from natural disasters such as hurricanes and even more frequently droughts, which can severely damage local production.

The success story of Mauritius, which is the sole member of the World Trade Organization (WTO) among these three SIDSs, is often held up as a good example of the benefits of outward orientation. However, it owes much of its success to trade preferences, including the Sugar Protocol, which strongly contributed to its economic take-off and social development. The contribution of sugar to GDP in Mauritius has now diminished, but it still plays an important multifunctional role in, for example, soil preservation, rural development, income distribution and equity, and savings of energy imports. Without trade preferences the Mauritius story could well have been one of hardship. The same applies, to a lesser extent, to the Seychelles, where the main export revenues now come from canned tuna as a result of preferential treatment accorded by the European Union (EU).

Both countries are net food importing developing countries, that have tried to lessen their dependence on food imports by stimulating their agricultural sectors through various means. They have had some success with a few products (such as potatoes, onions and poultry in Mauritius, and a few fruits and vegetables and poultry in the Seychelles), owing largely to protectionist measures in the form of well targeted tariffs (which can be high, but, nevertheless, below bound ones in Mauritius), import licensing and seasonal bans, and State trading enterprise operations. They need to promote these elements of their agricultural trade policy in the WTO negotiations. SIDSs should be allowed some flexibility in terms of market access, an issue which appears to be more important for them than domestic support at this point in time (however, that could change in the long run, and, in fact, Mauritius joined other SIDSs to call for raising the *de minimis* limit).

Since SIDSs' export market shares and revenues could be considerably threatened by a faster and deeper reform process (e.g. erosion of tariff preferences and elimination of the sugar rent), they should favour modalities that slow down tariff reductions and reform of tariff rate quotas (TRQ), as well as reductions of export subsidies in developed countries. There is no evidence of damage to farmers in Mauritius and the Seychelles from OECD countries' massive support and subsidies for their agricultural sector. This argument applies equally to the Comoros, even if it faces a completely different challenge as a very poor LDC trying to implement an effective agricultural policy. Such a policy would require even more protection against potentially highly subsidized food imports. Finally, SIDSs should pursue additional objectives, such as requiring some special and differential treatment in WTO Agreements (e.g. the Agreement on Agriculture (AoA) and the Agreement on Subsidies and Countervailing Measures) and in their forthcoming negotiations for a free trade agreement with both neighbouring countries and the EU.

I. CHARACTERISTICS OF THE INDIAN OCEAN ECONOMIES AND THEIR ECONOMIC IMPACT

This report looks at three Indian ocean economies — Mauritius, the Comoros and Seychelles — that face the frequently cited natural constraints of SIDSs. It should be pointed out that the negative implications of these natural constraints taken together are much stronger than when considered separately (Salmon, 1997; Salmon, 2002). For example, it is often said in the economic literature that smallness leads to diseconomies of scale, but can be tackled by outward orientation. This is quite right for economies benefiting from a good geographical location (which means proximity to high-income or rapidly growing regions, such as Switzerland, Singapore or Hong Kong (China)). However, when remoteness (i.e. long distance from regions of rapid growth) is added to smallness, this solution is much less effective; this is the case of many SIDSs including those of the Indian ocean. In this context, it has been said that SIDSs are in a particularly difficult situation, since neither the well-known development strategy of export-led growth nor promotion of import substitution are likely to succeed (Faini, 1988). Domestic markets are too small for the latter strategy to succeed, while the former strategy is hampered by high transport costs (of both imported foreign inputs and national exports).¹ Service exports, often proposed as a remedy in the long run, cannot by themselves address the problem of serious diseconomies of scale.

These natural handicaps are rapidly reviewed in this first section. Taking **smallness** first, the areas of Mauritius, the Comoros and Seychelles are 2,040, 1,862 and 455 sq km respectively, and their population in 2000 was 1.2, 0.56 and 0.08 million inhabitants respectively. They therefore represent a little more than half (in the Mauritian case) the area of an average French *Département*,² and, in the case of the Seychelles, the population of a small French city. Clearly these sizes do not permit the usual learning curves derived from the domestic market, especially in many activities prone to economies of scale. Similarly, their combined GDP is about US\$ 5 billion, which is less than 5 per cent of South Africa's GDP. **Insularity** is not always considered a constraint as such, even if it impedes trans-connectivity in infrastructure and related goods (roads, rail, electricity). But for many SIDSs, including the Indian Ocean ones, insularity combined with **remoteness** hurts the competitiveness of production and exports. For example, sea freight costs from Mauritius to the main European ports are around US\$ 30 per tonne, and US\$ 110-120 and US\$ 130 per tonne respectively for the east and west coasts of the United States. By way of comparison, freight costs for Central American countries to United States ports are only US\$ 25 per tonne.³ This margin of difference, of US\$ 100 per tonne, might disappear in a liberalized United States sugar market.⁴ Similarly, air freight costs for fruits and vegetables from Mauritius to Europe are quite high, at 42 Mauritian rupees per kg (or 1.68 euros)⁵ in July 2002. Here again the combination of smallness and remoteness creates a competitiveness problem. This is compounded by the fact that, in the case of Mauritian pineapples (see below), the quantities exported are too small to warrant transport by sea cargo and the air cargo involves high transport costs. The Government of Mauritius sought to address this problem by introducing a Freight Rebate Scheme (FRS) in 1991, that has been operated by the Agricultural Products Export Promotion Authority since 1998. It has been reformed several times since its introduction, when it provided a rebate of 50 per cent of export freight costs for pineapples, orchids, beans and spices (subject to a ceiling of 2 million Mauritian rupees per exporter) and a rebate of 25 per cent for mangoes, carambola, lychees and avocados. During the 1990s the FRS benefited principally the pineapple exporters, who earned from 1 to 3.5 million Mauritian rupees, varying from year to year, and even 7.5 million Mauritian rupees 1998-1999 as a result of the relative take-off of pineapple exports (see below). This proved to be rather expensive for the public finances. Thus, in September 2000, a new system was introduced for pineapple on a weight basis, and in March 2001 it was planned to return to a 25 per cent rebate for fresh pineapple (50 per cent for processed pineapple).

¹ See for example the recent papers by Redding and Venables (2001 and 2002).

² But with a much higher density of about 600 people per sq km in Mauritius.

³ Interview with Michel Hardy, former director of the Mauritius Sugar Syndicate.

⁴ Assuming a price of US\$ 300/tonne as the completely liberalized market price of sugar, it would still represent a differential transport cost of one third of this price.

⁵ The exchange rate used in this report is 25 Mauritian rupees = 1 euro, which was the rate at the time of the field mission.

It should also be pointed out that since all these three States are archipelagoes, they face what some call *double insularity* as a result of inter-island costs. This is considered a particularly binding constraint on Comorian agricultural development.

As for **natural disasters**, their frequency has a huge impact on the economy, especially on agricultural production. For example, Mauritius frequently experiences hurricanes and droughts: in the past 12 years it has been hit by cyclones Firinga (1989) and Hollanda (1994), and droughts in 1993, 1994, 1995 and 1999. The results can be very damaging, as from the last drought in 1999, when sugar production was 40 per cent lower than that of a typical good year (1997 or 1998 with 620,000 tonnes). This severe drought, from October 1998 to January 2000, strongly reduced cane yield and had lasting effects on the 2000 crop as well (see the following table).

Mauritius	1996	1997	1998	1999	2000
Sugar production (tonnes)	588 455	620 589	628 588	373 924	569 289
Cane yield (tonnes/ha)	73.3	79.5	78.1	53.6	69.9

It appears that the measures listed in Annex II of the Agreement on Agriculture (AoA) of the WTO, regarding support to agricultural producers/exporters, do apply to a situation such as the 1999 drought.⁶ However, financing of such support, presently ensured by the Sugar Protocol, could be a serious issue in a liberalized world sugar market (see part II below).

II DEVELOPMENT OF THE AGRICULTURAL SECTOR AND MAJOR INTERESTS

This section offers a detailed review of the main agricultural interests of each country. The first part focuses on the domestic market, while the second part consists of an analysis of items of export interest.

II.1 Production for the domestic market

a) Mauritius

Mauritius has succeeded in becoming a rather diversified economy – by SIDS standards – from a sugar monocrop economy until the 1970s, progressively to a service-based economy. Industrial activities (mainly clothing) in the export processing zone (EPZ) have played an important role in contributing to the economic take-off. The per capita gross national income (GNI) reached US\$ 3,800 in 2000 (World Bank, *Atlas*, 2000), whereas for the same year the per capita gross domestic product (GDP) in terms of purchasing power parity dollars (PPP\$) was much higher, at US\$ 10,017 (UNDP, 2002). Following the decline of sugar in *relative* terms, agriculture in 2000 represented a small part of the total value added in the country (7 billion Mauritian rupees, or 6.6 per cent of the total), as well as of employment (54,000 persons, or 9.3 per cent) and exports (7.4 billion Mauritian rupees, or 19.6 per cent).⁷ However the sugar sector continues to play an important multifunctional role (see more below).

⁶ It is specified in Annex II, paragraph 8 of the AoA that support to producers/exporters is permitted if production loss caused by a natural disaster exceeds 30 per cent of the average of production in the preceding three-year period. In the present case, the 1999 crop of 373,934 tonnes represented 61 per cent of the 1996-1998 average of 612,544 tonnes.

⁷ Source: Central Statistical Office (2000).

Mauritius: Share of sugar production in GDP, employment and exports

Period	Share of sugar in GDP (%)	Sugar in total employment (%)*	Sugar in total exports (%)
1970s	25	45	90
1980s	13	20	40
1990s	10	15	30
2000	3.3	10	15

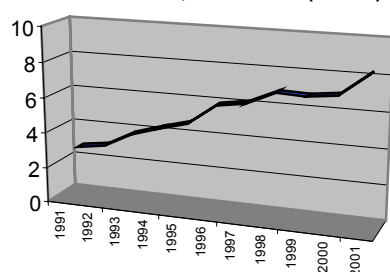
* Direct contribution

Source: Mauritius Chamber of Agriculture (MCA), except for 2000, for which author's calculations based on figures from the Central Statistical Office.

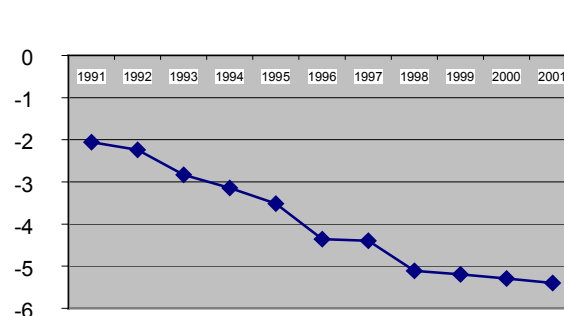
The agricultural policy objectives of Mauritius have been (i) to preserve the benefits of the Sugar Protocol in the long run by satisfying export commitments, and, more recently, by planning to rationalize the entire industry (see below), and (ii) to expand the production of other goods as much as possible through agricultural diversification programmes and incentives. Major non-trade concerns of Mauritius are related to sugar production (for details, see export section below). Mauritius is one of the more active States among members of the World Trade Organization (WTO), and is a good example of the importance of the multifunctionality of agriculture.

The **agricultural diversification** objective in Mauritius had already been seriously addressed in the early 1980s, notably with the 1983 White Paper on Agricultural Diversification, which noted that food imports (amounting to 1.2 billion Mauritian rupees) accounted for 25 per cent of total imports and contributed to 70 per cent of the total trade deficit (of – 1.7 billion Mauritian rupees) in 1982. This paper proposed the development of non-sugar agricultural production without reducing the area under sugar production, hence mainly using sugar land interlines and rotational crops. The objective was to achieve self-sufficiency in maize, onions, garlic and ginger, and the production of other crops (e.g. beans, peas, coconuts, citrus fruits, and spices) was also encouraged.⁸ However there were many difficulties in realizing this objective, including poor land quality, topography (limiting the use of mechanization) and climate conditions. In the 1990s the Government gave a new impetus to agricultural diversification with the encouragement of high value crops. But with the exception of anthurium flowers, and to a much lesser extent pineapple and lychee (see sub-section II.2 below),⁹ the results have again been disappointing.

Graph 1: Evolution of the Food Import Bill in Mauritius, 1991-2001 (bn Rs)



Graph 2: Food Trade Balance (excluding sugar) in Mauritius 1991-2001 (bn Rs)



⁸ Potato was not cited in the objectives.

⁹ We will not analyse the case of lychees, as this is a mainly cottage production, and not well registered. Suffice it to mention that lychee exports to the EU rose from 17 tonnes in 1991 to 116 tonnes in 1999 (MCA, 2001).

Hence the results of diversification were rather limited, as production of many new agricultural items declined¹⁰ or was even abandoned. Finally, the **food import bill** increased rapidly, reaching almost 7 billion Mauritian rupees,¹¹ and even more than 8 billion Mauritian rupees in 2001 (see tables 4 & 5¹² and figure 1 above). And the trade deficit in food (excluding sugar) has been growing, reaching more than 5 billion Mauritian rupees since 1998 (table 6 and figure 2). A further deterioration of this situation was avoided in 2001 mainly due to a strong increase in canned tuna exports (see sub-section II.2 below). Thus, excluding sugar, Mauritius appears more and more clearly as belonging to the category of net food importing developing countries (NFIDCs).

In 2001, the Mauritius Chamber of Agriculture (MCA) proposed a new strategic orientation for the agribusiness sector, including a redefinition of the agricultural diversification concept. Considering the inherent constraints face by local producers (including land pressure and scarcity, high costs of production due to rising prices of imported inputs, lack of scale economies, unfavourable climatic and agronomic conditions), the MCA concluded that Mauritius should move away from an inward-looking strategy, essentially based on supplying the domestic market, and adopt, instead, a more outward-looking approach, focusing on broader regional and international markets (MCA, 2001). The idea was to take advantage of the region as a production base and make Mauritius an agro-processing hub, notably exploiting opportunities arising from the United States' African Growth and Opportunities Act (AGOA). However, although this proposition seems appealing at first sight, it remains to be seen how such a strategy will cope with the high cost of freight (even regional freight) and high unit costs of production due to the small scale of production and high unit labour costs experienced by many SIDSs, including Mauritius (see Salmon, 1997). The canning business in Mauritius (except for tuna canning, to some extent) is already hampered by its very small scale, by international standards, and its dependence on imported raw materials for 90 per cent of its needs. In the end many agro-industrial products such as processed tomatoes and fruit juices, are actually supplied mainly from imports. Hence it also remains to be seen whether this new agribusiness strategy would not be better oriented first towards local consumption, with national producers turning to regional markets only after rapidly achieving competitiveness.

We have selected eight products of importance to Mauritian "domestic" agricultural interests: potatoes, onion, carrots, tomatoes, bananas, pineapples, tea and poultry (chicken). These are the non-sugar items with significant production volumes in this country. Most of them, with the exception of pineapple,¹³ are produced exclusively for the local market. As farm income is largely dominated by sugar sales, this non-sugar production is considered important essentially in the context of renewal of the agricultural diversification strategy. The Agricultural Marketing Board is responsible by law for the import, export, storage and selling of the so-called "controlled products", which include potatoes, onions, maize, beans, fresh milk and groundnut (potatoes and onions are discussed below in more detail). When local production of vegetables has been hit by a natural disaster (e.g. the storm of January 2002), the customs regulations and duties can be temporarily relaxed until local producers resume their supply.

Potatoes

Potato production in Mauritius has been stimulated since the mid-1970s in the context of the policy on agricultural import-substitution and diversification. It was hoped that self-sufficiency could be reached with a production of 24,000 tonnes. Many measures were taken for that purpose: imports were banned during the production season, retail prices were subsidized and controlled, and subsidized storage facilities were provided to producers. Despite this, self-sufficiency was never reached, except in 1986. The area under potato cultivation was reduced from 1,000 ha in 1994 to 600 ha by end 1990 following a reduction in profitability (see below). Local production of potatoes in the 1990s fluctuated between

¹⁰ In the case of maize, far from reaching self-sufficiency, local production reached its peak of 6,000 tonnes in the 1980s before falling to several hundred in the late 1990s, whereas local consumption is around 60,000 tonnes. The local cost of production, at 5 Mauritian rupees per kg, is much higher than the price of imported maize from South Africa and Argentina which is only 2.5 Mauritian rupees per kg (MCA, 2001).

¹¹ This is only 13 per cent of total imports amounting to 55 billion Mauritian rupees, but nevertheless contributes to 50 per cent of the total trade deficit.

¹² See annex II for tables 1 to 9.

¹³ And for tea, more than 10 years ago, but not any more since then.

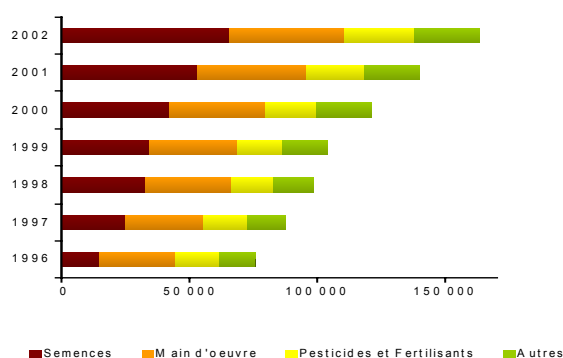
14,000 and 18 000 tonnes (see table 1), with the exception of the bad year of 1996 when it was only 10,600 tonnes. Hence production remains very erratic, on a downward trend,¹⁴ depending on climatic and agronomic factors, and the quality of imported seeds. The ratio of imports to national production in 2000 was around 60 per cent (table 2), with a volume of imports of 8,100 tonnes, which in the end means that local consumption of potatoes somewhat declined, to 21,000 tonnes during that year.

In 1998, a reform was implemented, in the face of growing subsidies (from 5 million Mauritian rupees in 1980 to 30 million Mauritian rupees in 1997). The new target for national production was fixed at 20,000 tonnes. The Government affirmed its commitment to the principle of a guaranteed producer price, at a level adjusted at the beginning of each season according to the actual cost of production.

The import regime was somewhat liberalized in January 1998, permitting free imports by private operators during the off-season (February to June). Prior to 1998, the AMB had been the only importer. But because of serious supply problems, it was decided in 1999 that the AMB would retain an import quota of 50 per cent over total potato imports, while the other 50 per cent quota was to be allocated to private operators through an import licensing system. At present, there is still some retail price monitoring: registered dealers are required to sell products supplied by the AMB at prices recommended by the latter, which also closely monitors them.

Figure 3: Evolution of the production costs of potato, 1996-2002 (Mauritian rupees/ha)

Source: MCA, 2002.



The local cost of production doubled between 1996 and 2000 (see figure 3), largely because of the rising price of seeds paid by producers. This is explained by the elimination of seed subsidies and the rising costs of seed imports (which represented 50 per cent of total needs) faced by the AMB, which keeps a monopoly over seed imports and supply. The AMB also buys all local seeds (produced by sugar estates and planters), the price of which rose rapidly during the decade, by more than 200 per cent, against more than 116 per cent for imported seeds; the prices of both seeds are now similar. This upward trend in production costs has implied rapidly rising retail prices, especially since the 1998 liberalization, which was not accompanied by a guaranteed producer price (see below). Hence the major benefits of price liberalization went to dealers, including international ones. The average c.i.f. unit price of imported potatoes was 8,630 Mauritian rupees per tonne in 2000 (table 3), which is similar to the producer price, but far below the retail price, whereas imported potatoes enter with zero duty (table 4),¹⁵ coming mainly from Australia and South Africa.

Potato price (Mauritian rupees/tonne)	1991	1997	1998	2000	2001
Guaranteed producer price	3 900	7 000	7 000	8 300	9 600
Retail price	5 000	9 000	12 000	14 320	14 400

Source : MCA, 2002.

¹⁴ The average annual production for the second half of the decade was 14,400 tonnes, as against 16,600 tonnes in the first half.

¹⁵ While the UR-bound tariff rate for potato is 37 per cent (see Mauritius WTO Country Schedule, and table 4).

Onions

National production of onions is following a strong upward trend, from almost 3,000 tonnes in 1991 to 8,500 tonnes in 2000. Average annual growth rates for the periods 1991–1995 and 1996–2000 were 19.2 per cent and 16.4 per cent respectively (see table 1). Despite this, Mauritius needs to import large quantities: the import ratio (over local production) varies from 70 per cent to 100–120 per cent (in drought years) (see table 2).

The market for onions is highly regulated through the intervention of the AMB. The main locally produced variety (70 per cent) of onion is the “high-yielding” variety, the producer price of which remains officially fixed, with an adjustment in 1999 to 9 Mauritian rupees per kg. The AMB wholesale price and the retail price have been fixed at 12.7 and 14 Mauritian rupees per kg respectively since 1999. The other varieties are the local “*toupie*” (low-yielding), the price of which was fixed at 9.8 Mauritian rupees per kg before its liberalization in August 1997. However, the AMB still buys 1,600 tonnes from the local “*toupie*” production on a quota system, at a regularly negotiated price (revised up to 12 Mauritian rupees per kg in 2000. The retail prices have been highly unstable, from 22–23 Mauritian rupees per kg in May–June 2000 (off-season) to 16–17 Mauritian rupees per kg the same year (during the production season).

The import regime is also highly regulated, as the AMB is the sole importer of onions.¹⁶ Imports are operated only during the off-season (with an ad valorem duty of 15 per cent against a UR-bound rate of 37 per cent) to cater for the local market. As with local production, imports followed a strong upward trend during the decade. The local average unit price in 2000 was 9.3 Mauritian rupees compared to the average unit price of imports of 6.88 Mauritian rupees (table 3): the difference of 35 per cent. Hence any progressive liberalization — including trade from regional suppliers such as Egypt or, more so South Africa, respectively members of the Common Market of Eastern and Southern Africa (COMESA) and the Southern African Development Community (SADC) — threaten to undermine local production.

Carrots

National production of carrots followed a strong upward trend during the 1990s, from a low volume of around 1,000 tonnes at the start of the decade to more than 6,000 tonnes in 1999, and even a surprising 11,000 tonnes in 2000 (table 1).¹⁷ Although carrots are imported freely, with a low ad valorem duty of 15 per cent (table 4),¹⁸ the import volume is nil or marginal (table 2). This logically means that local production is competitive enough, at an average unit price of about 12 Mauritian rupees per kg.¹⁹ Carrot production does not seem to be of much importance in Mauritius, perhaps since it is expanding, apparently without serious difficulty. But its export potential to regional markets may be worth considering, and investigating in a separate study.

Tomatoes

During the 1990s the production of tomatoes in Mauritius strongly fluctuated from year to year around an average of 11,000 tonnes, with a unit cost of production that stabilized at around 20 Mauritian rupees/kg by the end of the decade (table 1). There are no imports of fresh tomatoes, and this product does not belong to the AMB list of controlled ones, and the tariff charged is only 15 per cent.²⁰ As with carrots, this can be explained by the relative competitiveness of the national producers, whose unit price of production is close to international prices.²¹ Furthermore, there are some strong phytosanitary

¹⁶ Seed onion imports were liberalized in 1996.

¹⁷ This last figure, produced by the agricultural unit of the Central Statistical Office (CSO) (see also CSO, 2000) probably needs some confirmation or explanation, since it surprised some experts contacted during the field mission.

¹⁸ The Mauritian final UR-bound tariff rate for carrots is the general Mauritian agricultural one of 122 per cent.

¹⁹ Or 0.4 US\$ per kg (18cs/lb) (using an exchange rate of 30 Mauritian rupees per US\$). The United States grower price of fresh carrot was about 14 cs/lb in the late 1990s (<http://nfapp.east.asu.edu/Outlook02/Carrots.htm>), whereas the average FOB price during the 1980–1999 period was 13 cs/lb. (www.ers.usda.gov/briefing/tomatoes/tomatopdf/FOBRetailPriceVeg.pdf)

²⁰ The UR-bound tariff rate for fresh tomatoes is 122 per cent.

²¹ Of about 30cs/lb, or 20 Mauritian rupees per kg (at an exchange rate of 30 Mauritian rupees to US\$ 1).

norms applied by the quarantine section of the Ministry of Agriculture in order to protect the local varieties from imported germs. On the other hand, since there is no local tomato processing industry, Mauritius is dependent on external suppliers of processed tomato products.

Pineapples

The production of fresh pineapples (Victoria variety) is highly erratic in Mauritius: in some years production volume is as low as 1,000-1,500 tonnes (1991 and 1997–1999), and in others it is more than 4,000 tonnes (1993 and 1995). There are still no significant pineapple imports, so that the consumers must adjust the quantities they demand. The unit cost of production is about 15 Mauritian rupees per kg, and the ad valorem tariff is 40 per cent (table 4).²² There is no world price for fresh pineapple, but the average 2000 f.o.b import prices for the United States and the EU were US\$ 0.49 and US\$ 0.72 per kg (or 15 and 21 Mauritian rupees) respectively.²³ So it can be concluded that local production of pineapple is fairly competitive, but faces some expansion problems. Yields are considered low and the production suffers considerably from insects. In all, the volume produced appears insufficient and too unstable to potentially supply a local canning industry. There are some exports of fresh pineapple (several hundreds of tonnes in the most successful years — see the section on exports), but growth is hampered by high freight costs.

Bananas

Banana production in Mauritius is about 9,000 tonnes, except for difficult years (table 1). The average unit production price is more or less 4 Mauritian rupees per kg, which signifies a rather efficient production system, since the most competitive producers in the world (e.g. Costa Rica) export at prices of about US\$ 0.25 or 8 Mauritian rupees per kg. Hence there are neither significant imports, which would be further discouraged by an ad valorem duty of 40 per cent (table 4),²⁴ nor exports. The export potential of bananas may be explored, but at present it is probably limited by scarcity of land.

Poultry

The poultry industry (chicken) is a good success story of the development of Mauritius' non-sugar primary products sector. Local production rose regularly in the 1990s, and reached its peak in 2000 with a volume of 25,000 tonnes (table 1), all locally consumed. There are neither exports nor significant imports of poultry (table 2). The local market is highly protected, with an ad valorem tariff of 80 per cent (table 4).²⁵ The average unit price of production is almost 40 Mauritian rupees per kg, which shows some degree of efficiency, considering the small-scale operations of Mauritian poultry producers (the biggest factory in Mauritius produces around 8,000 tonnes of chicken per year). In 2000, the average world import price for chicken meat was near US\$ 1 per kg (or 30 Mauritian rupees), whereas the average EU export price was US\$ 1.3 (or 39 Mauritian rupees).²⁶ Nevertheless, the regional trade liberalization process (through COMESA and SADC) could represent a serious threat to the local industry, particularly in the SADC case, as the South African producers operate on a much larger scale (a typical factory produces 25,000 tonnes) and may represent a stronger regional rival supplier of the "rainbow chicken"²⁷ (personal communication, Mauritius Chamber of Agriculture). Our investigation revealed that the export unit price of South African chicken meat was about US\$ 1 per kg in 2000.²⁸

²² The UR-bound tariff rate for fresh pineapples is 122 per cent.

²³ FAO agricultural trade database. According to the CSO external trade data, Mauritius still benefits from a f.o.b export unit price of about 40 Mauritian rupees per kg, which is much higher (see section on exports and table 7).

²⁴ The UR-bound tariff rate for banana is 82 per cent.

²⁵ The UR-bound tariff rate for fresh or chilled poultry is 122 per cent.

²⁶ World imports for that year were estimated at 5.9 million tonnes for a total bill of US\$ 6 billion, of which EU exports accounted for 1.69 million tonnes worth US\$ 2.23 billion (FAO Agricultural Trade Database).

²⁷ The SADC Trade Protocol provides for "sensitive products" including chicken, to be liberalized between 2008 and 2012.

²⁸ South Africa exported 6,393 tonnes of chicken meat for a total value of US\$ 6,668,000 (FAO Agricultural Trade Database). It also exported 9,616 tonnes of other poultry meat.

This amounts to a price difference (producer price in Mauritius less South Africa f.o.b export price) of about 10 Mauritian rupees/kg, or more than US\$ 300/ tonne, which is largely enough to cover freight costs and eliminate, in case of free trade, the Mauritian industry. Thus the caution expressed by the MCA is worth serious consideration. The impact of free trade with the EU (following an Economic Partnership Agreement) would be much less damaging for the Mauritian poultry industry, since the average costs appear similar between the EU producers and the Mauritian ones.

Tea

Tea is the last product on our Mauritian “domestic list”. It used to be an interesting case of agricultural diversification in Mauritius, and was considered a relative success, even if the Tea Board Authority, a State trading enterprise (STE), which owned 70 per cent of the area under tea, had a poor record of managing the sector (English, 2002: 4). Production reached its peak with a total volume of 30,000 tonnes in the early 1990s (mainly green leaf harvested on 3,000 ha), while the total export volume rose to more than 4,000 tonnes, earning a substantial export revenue (e.g. 103 million Mauritian rupees in 1993, from black tea exports — see table 7). But it experienced a crisis during the 1990s, with production falling to only 6,400 tonnes in 2000 (on 670 ha), whereas exports were less than 40 tonnes, valued at 6 million Mauritian rupees (going mainly to France and Reunion Island).²⁹ By the end of 1998, 2,374 ha of tea had been uprooted, most of which was converted to sugar cane and the remainder allocated to horticultural products.³⁰ The remaining production almost exclusively caters to the local market, which is quite protected since a permit, issued by the Tea Board, is necessary to import.³¹ Imports by manufacturers are thus permitted for blending purposes, while private traders may import those types of teas that are not grown in Mauritius. Furthermore a nominal tariff of 40 per cent is normally applied, somewhat reduced for little packs of black tea to a lower effective rate (after exemptions, see table 4). Very small volumes of green tea (4 tonnes) and black tea (8 tonnes) were still imported in 2001 (table 4). During our field mission, some experts affirmed that local production had suffered from low competitiveness vis-à-vis foreign competitors, notably Kenyan ones, but this is not so evident considering available figures.³²

b) Seychelles³³

The Republic of Seychelles is an archipelago of 116 islands, spread over an exclusive economic zone (EEZ) of 1.3 million sq km. against a total land area of 475.65 sq km., of which 47 per cent is protected as a nature reserve. Mahe, the largest island with 90 per cent of the population, is only 29.4 km long and 12.4 km wide at the widest point. The GNI per capita in 2000 was US\$ 7,310 and the GDP per capita at PPP\$ stood at 12,508 (in 1998). The main recent economic problem of Seychelles has been a chronic shortage of foreign exchange resulting from a large balance of payments deficit caused mainly by public overspending (that resulting in a gap of almost 20 per cent of GDP in the late 1990s (Salmon, 2001). Seychelles is in the process of acceding to the WTO,³⁴ though it suffers from a clear lack of human and financial resources to master all the implications of accession³⁵ (the same applies to its regional trade negotiations within SADC and COMESA).³⁶ Some elements of its trade policy, including substantial non-tariff barriers,³⁷ also appear to be in conflict with WTO accession prerequisites³⁸ (or at least costly in terms of compliance with WTO rules).

²⁹ As tea exports plummeted to almost zero, they will not be treated in the section on exports.

³⁰ The Tea Board is now monitoring the conversion to sugar cane of lands formerly under tea, since the Government decided to withdraw from tea plantation.

³¹ Mauritius Chamber of Commerce and Industry (MCCI), at: www.mcci.org/IT_imports.htm

³² The average unit production price in Mauritius is 10 Mauritian rupees per kg (for green leaf tea, see table 1), and the Mombassa market price of tea, was less than US\$ 1.5 in the mid-1990s, and rose to US\$ 2.4 in 2001 (UNCTAD, InfoComm). These figures do not clearly confirm the assertion of low competitiveness.

³³ Except otherwise cited, all information for Seychelles in the report is taken from Moustache (2002).

³⁴ The WTO Working party on the accession of Seychelles was established on 11 July 1995.

³⁵ Notably the TRIPS Agreement.

³⁶ Seychelles is a member of both COMESA and SADC, but is not yet applying their trade protocols.

³⁷ Among others a State Monopoly Trading Enterprise (see below) import permits, at the discretion of the government, some quantitative restriction of imports (which are non-binding because of the severity of the foreign exchange shortage).

³⁸ Hence the WTO Working Party on Seychelles' accession stopped its meetings after 1997, at least to 2000.

Fishing and tourism are the two principal industries, while agriculture is much less significant, contributing only 3.8 per cent to GDP in 1999.³⁹ With the two principal sectors being outward oriented, it might be surprising that this country could suffer from a foreign exchange shortage. However, this is because the smaller the country (as Seychelles is), the more dependent it is on imports for domestic consumption (especially at an upper income level). A large part of the consumption basket is simply not produced locally, for reasons of scale economy.

Following its social welfare policy, as enshrined in the Constitution, the Government is strictly regulating land allocation through State committees. Both privately owned plots and on State-leased land are under agriculture. Of the 2,900 ha of potential agricultural land only 600 ha are under arable agriculture, of which 200 ha are under intensive cultivation. The average farm size is between 0.5-2 ha and there are 520 farmers registered with the Ministry of Agriculture and Marine Resources (MAMR) (with an estimated 3,200 individuals working in agriculture), and no producer association or cooperative. The annual recurrent budget for the MAMR has been between 13.8 and 19.9 billion Seychelles rupees or US\$ 2.5–3.6 billion,⁴⁰ which amounts to 2–2.7 per cent of the total budget.⁴¹ The Seychelles Marketing Board (SMB) has the sole monopoly to import seven essential food items: rice, sugar, flour, cooking oil, fruit, vegetables and milk and dairy products, which it sells with a range defined by a retail price formula (i.e. c.i.f. price + trade tax + a 30 per cent mark-up). These seven products are imported with zero duty,⁴² while imported meat, fish and other foodstuffs are charged an ad valorem rate of 25 per cent, 100 per cent and 0-25 per cent respectively (150 per cent for imported canned tuna). The SMB is also the sole producer of agro-industrial products such as juices, jams, milk and pickles, processing them from imported inputs, while some recent private initiatives (a few homes and three small industrial units) have been launched that need technical and financial assistance. Under the Investment Promotion Act of 1994, which established the Seychelles International Trade Zone (SITZ), different tax concessions are granted to new investment projects in several sectors including agriculture, marine resources and manufacturing. Promoted sectors also benefit from preferential credit rates.

A new strategic plan for development of the agricultural and fisheries sector has been proposed for the 2000–2010 decade by the MAMR (MAMR, 2002), but has not yet been approved by the Government. It aims at rationalizing both production and public support in agriculture to achieve greater self-sufficiency in a range of products.⁴³ In 2000, local supply met 65 per cent of domestic demand for vegetables,⁴⁴ 40 per cent for fruit,⁴⁵ and 100 per cent for eggs. Statistics for production of the major common crops and imports are shown below. Meat production and import figures are shown in the next table; they indicate a good market share for local producers of poultry and, to a lesser extent, pork. On the other hand, 96 per cent of beef and 100 per cent of rice is supplied by imports.

Concerning fish and seafood,⁴⁶ the total small-scale, local fish catch fluctuated between 3,300 and 4,800 tonnes during the period 1995–2000, while the semi-industrial fish catch boomed, from 26 tonnes to 457 tonnes in 1999 but fell to only 390 tonnes in 2000. The catch of prawns also followed a strong upward trend, from 196 tonnes in 1995 to 425 tonnes in 2000, which shows a high level of self-sufficiency. The high volumes of fish imports over the past five years (78,000 tonnes in 2000 alone) consisted almost entirely of frozen tuna destined for the canning factory.

Seychelles is often classified as a NFIDC. The food import bill has more than doubled during the 1990s, from US\$ 34 million in 1990 to US\$ 76 million in 2000 (World Bank, *Countries at a Glance*

³⁹ In 1999, the GDP was estimated at US\$ 610 million (World bank, Country at a Glance tables); hence agricultural value added must have been about US\$ 23 million.

⁴⁰ With an exchange rate of 5.5 Seychelles rupees = US\$ 1. The Government's recurrent budget for agriculture is allocated mainly for personnel emoluments.

⁴¹ An amount of about US\$ 20 million was allocated for public investment in agricultural infrastructure during the 1990s, financed by both multilateral agencies and development banks (mostly the Asian Development Bank (ADB), which loaned US\$ 8 million).

⁴² Following the Trades Tax Regulation (1996).

⁴³ The 1990s saw significant encroachment by housing and tourism development, and the 2000–2010 plan suggests the formulation of legislation to protect all agricultural land.

⁴⁴ The 2000 production volume for vegetables was about 3,200 tonnes

⁴⁵ The 2000 production volume for fruits was about 800 tonnes

⁴⁶ Excluding tuna canning; this is treated in the section on exports.

tables). At the same time, the net gains from canned tuna exports were about US\$ 68 million in 2000, an exceptionally good year (see section on exports).⁴⁷ Despite these figures, Seychelles qualifies as a NFIDCs. As in many SIDSs, the Government of the Seychelles is also conscious of the necessity to protect its beautiful natural resources, and is therefore pursuing the sustainable development concept; it would probably be favourable towards negotiations on non-trade concerns as a member of the WTO.

Supply of selected common crops in Seychelles (tonnes), 2000

Crop	Banana	Cucumber	Tomato	Chinese cabbage	Pineapple	Eggplant	Sweet melon
Local production (P)	611	602	711	376	42	137	10
Imports (M)	3	1	155	0.4	151	0.7	35
Ratio P/M (%)	99.0	99.8	82.0	99.9	21.7	99.5	22

Source : MAMR, 2000.

Seychelles: Local meat production (P) (1996-2000) and imports (M) (in 2000) (tonnes)

	1996	1997	1998	1999	2000	Imports 2000	Ratio P/M, 2000 (%)
Chicken	1 056	1 187	1 127	1 157	1 276	285	82
Pork	358	318	397	427	574	435	57
Beef	24	12	13	23	25	537	4

Source : MAMR, 2000.

c) *The Comoros*⁴⁸

The Comoros is made up of three separate small islands : Grande Comoro (1 148 sq km.), Anjouan (424 sq km.) and Moheli (290 sq km.), with a total of 530,000 inhabitants. With a GNI per capita of US\$ 380 in 2000 (the GDP per capita at PPP stood at US\$ 1,588), it belongs to the LDC category. Unlike the Seychelles, and to a lesser extent Mauritius, in the Comoros the agricultural sector still plays the most important role in both production; it contributed to 40 per cent of GDP, estimated at US\$ 210 million in 2000 (World Bank, *Countries at a Glance* tables) and to 70 per cent of employment, and it is the only exporting sector. However, the average annual growth rate of agriculture has been declining, from 4 per cent in the 1980s to 1.6 per cent in the 1990s, whereas the average growth rate of the population was 2.5 per cent during the 1994-2000 period (World Bank, *Countries at a Glance* tables). The economy is suffering considerably due to the underdevelopment of most of its sectors: its export/import ratio is less than 10 per cent, as imports are necessary despite the very low level of income. In particular production is hampered by an inadequate infrastructure⁴⁹ and credit, and a low level of education (with one half of the adult population illiterate). the Comoros is not yet a member of the WTO, although the Government has expressed some interest, in principle, of accession.

The agricultural sector consists of subsistence/micro farming, with a high level of domestic consumption and farming for export (see the section on exports for the latter). Only export statistics are known precisely (available from the customs office). However, according to some estimates, the main agricultural production consists of food crops (47 per cent of total), fisheries (21 per cent), products for export (13

⁴⁷ This does not take into account the expenditure on the maintenance of foreign vessels and fees paid in the Seychelles.

⁴⁸ Except otherwise cited, information for Comoros is taken from IFRC (2000), and figures are from the Direction des Statistiques (of the CSO).

⁴⁹ For example, business activities are hampered by many electricity cuts, technical problems in main ports, etc.

per cent), forestry (11 per cent) and livestock rearing (8 per cent). Production for the local market includes coconut (75 tonnes in 2001), banana (60 tonnes), paddy (2,900 tonnes) and maize (3,800 tonnes) (Direction de la Statistique, various). Fish imports are negligible (about 200 tonnes) and there is near self-sufficiency in fish products, with an annual catch of 13,500 tonnes.⁵⁰ The Comoros has signed some fishing agreements with foreign vessels to let them operate in the Comorian EEZ, but since there is no local transshipment, it is difficult to evaluate these industrial catches. Meat is consumed in very small quantities, as the livestock rearing industry faces many difficulties (hence dependence on imports, particularly chicken, is very high). In general, the agricultural sector in the Comoros has some unexploited potential, notably good naturally fertile volcanic lands,⁵¹ and a favourable climate, which allows for continuous harvesting. But it faces many constraints, including (a) inadequate land rights, (b) high inter-island transport and communication costs, and (c) insularity and isolation from main international cargo maritime routes. More precisely, local households often prefer to consume imported rice, which is less expensive than such locally produced traditional food crops as bananas, sweet potatoes and cassava (see below). Hence one of the main challenge for Comorian agriculture is to increase the competitiveness of its products at the consumer level, notably through an intensification of production and a rationalization of the distribution channels. This has been one of the objectives of many agricultural development projects and plans,⁵² among them the more recent EU project for staple food development and seed support (DECVAS—Développement des cultures vivrières et appui semencier) and the World Bank's pilot programme for agricultural services. The former set some new price objectives for local food crops, as shown in the following table. From this, we can observe that the present local price of the main food crops is about 200 Comorian francs (CF) (or 0.4 euros) per kg, compared with the average price of imported rice, which was 156 Comorian francs in 1999 (to which is added a customs duty of 50 Comorian francs – a tariff equivalent of 33 per cent, see table below).

Present price and objectives for selected food crops: the Comoros, 2000

Product	Present price (CF per kg)	Objective	Variation (%)
Bananas	225	150	-33
Cassava	175	140	-20
Potatoes	200	175	-13
Taro	250	200	-20
<i>Igname</i>			-10

Source: Assoumani, 2000.

NB: In January 1999, 1 Comorian franc (CF) = 0.00198 euros.

Though imports of meat, fish and dairy products have been declining in recent years, the food import bill has been rising, from US\$ 10 million in 1990 to US\$ 23 million in 2000 (World Bank, *Countries at a Glance* tables), of which rice accounted for more than US\$ 9 million (4 721 million Comorian francs). The import regime has been liberalized, with the rationalization of tariffs and the elimination of all non-tariff barriers (NTBs), except for rice. Vegetables and roots face a 40 per cent ad valorem duty (IOC, at: <http://www.coi-info.org>). Imports of fish and basic rice face a customs duty of 150 Comorian francs (or 0.3 euro) and 50 Comorian francs (0.1 euro) per kg respectively (IOC database). Basic rice is imported solely by the State-trading enterprise, ONICOR (about 30,000 tonnes a year), which, according to the Government, has a monopoly for reasons of security of supply and price stability. The low duty on rice (equivalent of 33 per cent ad valorem) is intended to maintain the local consumer price, but at the same time it may be hampering profitability for the local food crops sector, thus limiting its development and efforts towards self-sufficiency, as in many African countries (Mamaty, 2002; FAO, 2001a and 2001b).

⁵⁰ All from traditional boats (latest evaluation available from IFRC, 2000, Rapport Pêche). The yearly catches have been increasing thanks to the use of fish concentration devices (FCD), but of course this is also highly dependent on their maintenance.

⁵¹ But irrigation potential is limited, with almost no possibility in Grande Comore (according to some studies done during the 1970s). The present irrigated area is only 85 ha.

⁵² Such as the Nouvelle Politique Agricole (NPA) (the new agricultural policy), started in 1994.

Evolution of food selected food imports: the Comoros (1997–1998).

Imported products	Quantity (tonnes)			Value (million CF)		
	1997	1998	1999	1997	1998	1999
Rice	34 322.6	25 896	30 237	3947.3	3 184.1	4 721
Meat and fish	3 343.1	2 271.1	2 118	2 513.6	1 786.2	1 528
Dairy products	938.4	762.8	698	800.5	638.6	551

Source: Aboubacar Allaoui, in IFRC (2000).

II.2. Agricultural exports

a) Mauritius

The main agricultural export for Mauritius is sugar. We also discuss three other products, as examples for their relative success (anthurium, tuna), or fragility (pineapple); the failure with tea has been treated above.

Sugar

In Mauritius more than 70,000 ha are under sugar cane cultivation, representing nearly 90 per cent of the total arable land and almost 50 per cent of the total land area of the country. Almost the entire production is exported (depending on the annual production), mainly to European destinations⁵³ thanks to the Sugar Protocol. Another sugar trade preference is accorded by the United States (see below). The sugar industry is highly regulated, with the Mauritius Sugar Syndicate (MSS), a private (planter-owned) institution having a monopoly, by law, over both the external and internal trade in sugar. The Mauritius Sugar Authority (MSA) is a parastatal body in charge of managing the public policy aspects, such as subsidizing field extension services to planters, investment in mechanization, bulk storage and handling facilities. The MSA operations are financed by a levy (“global cess”) on sugar export earnings, paid back by the MSS (for the 2000/01 crop this amounted to 475 Mauritian rupees).

Under the Sugar Protocol (which is independent of the Lomé Convention and its successor, the Cotonou Agreement), the EU undertakes for an indefinite period to purchase and import, on a duty-free basis, and at a guaranteed price, specific quantities of cane sugar originating in ACP countries, including Mauritius which enjoys an annual quota of 487,200 tonnes per year. This is considered WTO-compatible in terms of Article XIII of GATT 1994 and the EU market commitments under Article 4 of the AoA,⁵⁴ but is likely to be increasingly challenged (e.g. the ongoing disputes between the EU on the one hand, and Brazil and Australia on the other). Besides, the tariffication of sugar in the EU has been devised to largely match the difference between the internal and external prices (c.i.f.) even in the final bound rate of 2004 (UNCTAD, 1996).⁵⁵ The Special Preferential Sugar (SPS) Agreement⁵⁶ provided an additional initial quota of 85,000 tonnes, paid at 85 per cent of the EU intervention price, but the 2001/02 SPS quota for Mauritius was only 38,500 tonnes. The Sugar Protocol and the SPS Agreement are today an

⁵³ More specifically to Great Britain, which accounted for more than 80 per cent of total sugar exports in 2001 (see table 9), the largest proportion of which was due for delivery to Tate and Lyle under a five-year rolling contract signed by the MSS.

⁵⁴ The EU has made a market access commitment of 1.3 million tonnes, which corresponds to the quota already provided to ACP suppliers in the Protocol.

⁵⁵ The final bound rates for raw and white sugar are 339 ECU/tonne and 419 ECU/tonne respectively or ad valorem equivalent of 287 per cent and 256 per cent (source: UNCTAD, 1996, annexes VI and VII).

⁵⁶ Signed in July 1995 (with a duration of 6 years) in order to cope with the EU enlargement to include Finland and Portugal, it was renewed in 2001 with specific provisions to take account of the implications of EU sugar imports arising from the Everything-But-Arms (EBA) Initiative. This means (because the growing LDC quota in the EU sugar regime is deducted from the annual total) that the quota for Mauritius under the SPS Agreement will be progressively reduced before 2009, when all LDC sugar is due to enter the EU duty- and quota-free.

integral part of the EU sugar regime. In the EU, reform of the Common Agricultural Policy (CAP) implies a further reduction of support prices towards world market levels with compensation in the form of direct income aid to European farmers.⁵⁷ No mention has been made so far about sugar in the Agenda 2000 document,⁵⁸ which, in a way, could be seen as recognition of the special status of sugar. The EU sugar regime will be comprehensively reviewed in early 2003. But since 1986 the EU price restrictive policy (e.g. nominal freeze) has already implied a serious decline in real prices paid to producers (of around 45 per cent in Mauritius, according to MSS, 2000).

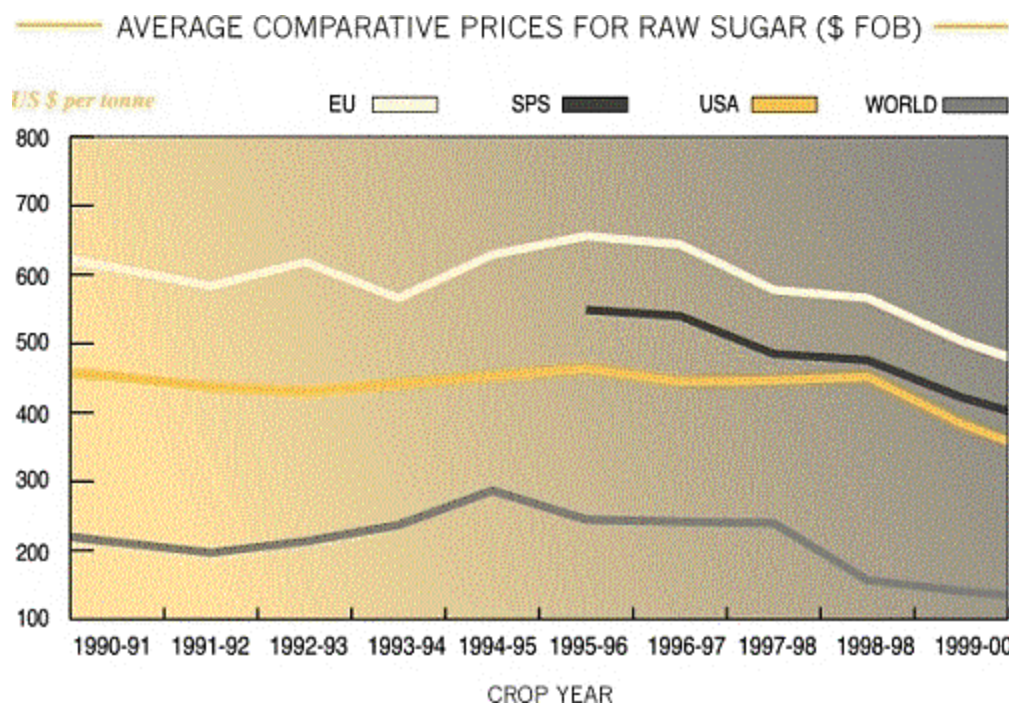
Mauritius also benefits from United States sugar policy, with an annual tariff rate quota (TRQ) of 15,000–25,000, tonnes at a high price which is 15–20 per cent less than the EU one (see graph), but the difference narrows when the euro depreciates. Reforms of the United States Farm Act in 1996 did not concern sugar, but the TRQs are threatened in the longer term with arrangements under the North American Free Trade Agreement (NAFTA), according to which Mexican sugar exports will enter the United States market duty- and quota-free from 2008.

The price Mauritius received for its sugar in the 1990s was two to three times the world price, which represented a bonus of around than US\$ 250 per tonne. For an export volume of say 550,000 tonnes per year, this preferential arrangement amounted to a bonus of almost US\$ 140 million a year,⁵⁹ or 5 per cent of the country's 1993 GDP.⁶⁰ Thus the role of sugar trade preferences in the economic take-off of Mauritius cannot be overlooked, even without considering the excellent external (multifunctional) effects it also had (more on this below).

Price of sugar	EU price for ACP sugar	United States price (New York no. 14 domestic)	World price (New York spot price)
2000/01	523.70 euros per tonne (22 cs/lb)*	\$463 (21cs/lb)	\$200–240 (9–11 cs/lb)

Source : MSS (2000)

* Using an exchange rate of 1.1 euros = US\$ 1; one pound = 453.6 grammes (1 kg = 2.2 pounds)



Source: Extracted from MSS, *Report and Statement of Account*, 1999 (downloaded from <http://mss-website.intnet.mu>)

⁵⁷ Which has to be decoupled in order to qualify for the "green box".

⁵⁸ Containing the EC's proposals in respect of CAP reform.

⁵⁹ Borrell (1991) gives an estimate of US\$ 193 million.

⁶⁰ The 1993 GDP was estimated at US\$ 2,780 million (World Bank, *World Development Report*, 1995). This bonus evaluation simply omits the fact that, without the Protocol, Mauritian sugar might not be competitive enough in the world market to enable sugar exports.

The table below also shows that the internal sales prices are maintained at a fairly low level,⁶¹ but the ex-syndicate price paid to producers is rather high, representing more than the EU price for the 2000/01 crop. Indeed, the average unit cost of production is still very high in Mauritius, around 18 cs/lb, or more than 80 per cent of the EU/ACP-guaranteed price of 2000/01. That leads us to consider the prospects for the sugar sector in Mauritius.

**Prices of sugar sold by the MSS (export and local market) and paid to producers
(ex-syndicate price, Mauritian rupees/kg)**

	EU price (Sugar Protocol)	United States price	Average export unit price (Mau Rs/kg)	Average. local market	Ex- syndicate price
1999/00	14.28	16.18	14.27	5.27	12.37
2000/01	13.25	15.94	13.16	5.41	11.57

Source: MSS (2000).

NB: Since 1995, local sales prices have been fixed by government notice at Mau Rs. 2.21 (raw sugar to a wholesaler), Mau Rs 3.71 (white sugar to a wholesaler), and Mau Rs.8.3 (raw or white sugar for industrial usage).

The future of sugar in Mauritius is clearly dependent both on external and internal issues. On the external side, it is highly dependent on the EC sugar regime-EU intervention price. Thus it is relevant to take a look at the export subsidies aspect of the negotiations on agriculture (discussed below in section III). There have been several analyses of the possible impact of liberalization of the world sugar market. Borrell (1999) presents some interesting elements similar to other simulation results. In the world market for sugar, nominal producer subsidies amount to US\$ 18.2 billion a year. Because of strong protection measures, efficient producers simply cannot compete and displace less efficient regions. According to some model simulations used to evaluate the impact of a complete liberalization of the world market by 2008 (without taking into account rationalization efforts by competitors), the world price should increase by 38 per cent, while western Europe and United States prices should fall by 40 and 25 per cent respectively. Of course, this scenario envisages a complete redistribution of world sugar market shares. It estimates a world welfare gain of US\$ 4.7 billion per year, but there are of course winners and losers, and this is not good news for the so-called "small preferential exporters", including Mauritius. These countries are described as high-cost producers that use expensive resources to produce sugar and qualify for export subsidies.⁶² To calculate the net loss these small preferential exporters will face with the removal of export subsidies in the EU and the United States (under free trade), it is proposed to net out the rise in world prices and costs of production. With "reasonable assumptions",⁶³ Borrell concludes that the welfare loss for Mauritius under free trade will not be the initial protocol bonus (of US\$ 193 million), but rather 56 per cent of it, that is US\$ 109 million, with

⁶¹ Sugar imports are normally banned in Mauritius, but are allowed in some years to compensate for unusually poor harvests (e.g. in drought years) and to help meet export commitments. This means that sometimes all local production is exported and the local consumption is then satisfied from imports. In this case imports enter duty free and are supplied after a tender procedure that ensures the lowest prices for a given quality.

⁶² It is asserted that the subsidy received creates a tendency to raise costs of production in the subsidized country. In Mauritius for example, Borrell affirms that export subsidies have been used to sustain special conditions for workers, special land market regulations and other arrangements that lock resources into the sugar industry and raise costs. Much of the benefits of export subsidies are thus said to be absorbed in inefficient resource use, and the costs of the resources must be netted out. Social measures are considered here as "inefficient use" (despite their strong contribution to the excellent socio-political fabric of Mauritius, and, by extension, to creating conditions of further growth and take-off in the other sectors of the economy). In fact this methodology implicitly hypothesizes a full employment of resources, which is debatable in terms of labour, for example, (full employment in Mauritius has been limited for a couple of years, and since the end of the 1990s unemployment rose rapidly, reaching about 10 per cent in 2002, which confirms the predictions of the SIDS labour market theory, see Salmon, 1997).

⁶³ That is a price elasticity of supply and demand equal to 1, an initial EU price of US\$ 566/tonne, and a domestic price of US\$ 566/tonne; note that the latter does not fit the Mauritian situation, where the internal price of sugar is close to world market prices and hence will rise unless the State offers consumer subsidies, which is not yet foreseeable. In this case, some reduction of welfare for Mauritian consumers of sugar should be taken into account when assessing the net impact.

a free world price of US\$ 350 (or about 16 cs/lb, instead of its present level of US\$ 254 in the base scenario). In this case, production in Mauritius would decrease from 625 million tonnes to 386 million tonnes. The present cost of production in Mauritius (18 cs/lb or US\$ 396) is higher than this simulated world price, which means that some internal adjustment has to be realized before Borrell's estimation makes sense (see below, concerning the internal aspects). World exports will also expand to emerging markets in developing countries, where sugar consumption should follow a strong upward trend (with their rising incomes). It will be important for Mauritius producers to get a share in these new markets.

On the internal side, in 2001 the Ministry of Agriculture introduced a four-year Sugar Sector Strategic Plan, prepared by the MSA that aimed at restructuring and rationalizing the sugar industry. That same year its recommendations were enacted to become the Sugar Industry Efficiency Act (SIE). The SIE stipulates that the production volume should be maintained at 620,000 tonnes in order to fulfil export commitments; the cost of production should be reduced from 18 c/lb to 14 c/lb in the medium term, and to a further 10-12 c/lb in the longer term (2006 to 2008). Among the many means for achieving this is a rationalization of mill operations through factory closures (from the existing 14 to, ideally, 7 or 8).⁶⁴ The plan also emphasizes the preparation of land under sugar for mechanization⁶⁵ and irrigation.⁶⁶ A substantial reduction of the labour force is envisaged through mechanization and the regrouping and modernization of small planters. This labour force adjustment should be achieved through a socially feasible voluntary retirement scheme (VRS). The SIE combines all these objectives, together with two others: democratization of land ownership and agricultural diversification, in a complex legal device.⁶⁷ Provisions for the Modernization and Agricultural Diversification Reserve (MADR) are included in sub-part C of the part III of the Act, and include a mandatory aggregate amount of 175 million Mauritian rupees to be credited by sugar producers to the MADR every year until the 2003 crop year. Here agricultural diversification is sought to be achieved through several measures: 10 per cent of the MADR shall be used solely for agricultural diversification;⁶⁸ and some minimal targets set for sugar producers to devote some harvested area to non-sugar products, and to interline and rotational crops.⁶⁹

The success of this strategic plan may largely depend on the effectiveness of the VRS implementation, since labour costs already make up half of the total sugar production costs, and are supposed to rise further with growth in the income level of the country. As stated in a study by the Institute of Development Studies (IDS) (2001):

“...the merit of the plan is that it is relevant to prospective change in the EU market over both the short and longer term. It aims to cut production costs to a certain extent in the short term, thereby ensuring the continued viability of exports under the Protocol even at lower EU prices (without facing a cost of production falling under the protocol price) and to make more radical change in the long term (thus positioning the country to take advantage of EU market opening in the future (...)) In the longer term (and in case of success), the Protocol would be less crucial for Mauritius than it is today...”

⁶⁴ The 1997 blueprint on centralization of sugar mill operations remains in force.

⁶⁵ That is, mechanization of field operations, such as cane loading, and to a lesser extent (because of physical constraints on land, in spite of de-rocking activities) cane harvesting. The ultimate objective is to achieve mechanization on 60,000 ha.

⁶⁶ Half of sugar production in Mauritius falls within rain deficient but potentially irrigable areas. Only half of that latter area (i.e. 17,000 ha) is already under irrigation and another 6,000 ha are planned to follow thanks to the Midlands Dam Project. By 2010 it is hoped that 32,000 ha will be provided with water-efficient systems. All the irrigation techniques and infrastructure will also be progressively modernized.

⁶⁷ The latter notably include numerous specific provisions which reinforce the role of the Sugar Investment Trust (created in the 1988 SIE Act) in land conversion and transfer of ownership, and also in mergers and take-overs of sugar cane companies or bodies. It is important to note that excluding these specific provisions, no transformation of agricultural land to non-agricultural use is legally accepted, except (a) with prior authority of the Minister and (b) with land conversion (high) tax paid.

⁶⁸ in the Act (fifth schedule) modernization is defined as several operations such as investment in bagasse electricity production, in factory modernization, in irrigation devices, in land preparation, diversification within sugar, etc. Agricultural diversification (seventh schedule) is defined inter alia as the acquisition or construction of infrastructure for the storage and conditioning of fruit and vegetables, for aquaculture, for production of vanilla, spices and medicinal plants, the setting up of an orchard to produce specified fruits and the acquisition of know how and techniques related to items listed.

⁶⁹ Not less than 200 ha under permanent gardens, not less than 510 ha under orchards bearing specified fruits, not less than 50% of the aggregate area of land use for the cultivation in interline & rotational land of crops other than sugar cane. The latter minimum aggregate area of land shall not be less than the area used in the year 1998. Permanent gardens is defined in the ninth schedule as a plot of land devoted to at least eight years to products such as onion, tomato, cut flowers, and high value added crops, seeds, vanilla, and so on. Specified fruits in the tenth schedule include inter alia banana and pineapples.

In viewing the multifunctional role of sugar in Mauritius, its production should be seen as a part of a cluster rather than as a simple pillar of the country's development, as it also serves strong non-trade purposes. First of all, as its benefits are rather evenly distributed among the population and subregions of the island, sugar production has largely helped to alleviate poverty and to prevent massive internal migration to urban cities. It has thus contributed significantly to the harmonious socio-political condition of the nation. This has been all the more important since the population density is so high (600 inhabitants per sq km). It has been said (Humbert, undated) that, sugar activity and benefits have percolated to the very base of the society. This is reinforced by the fact that it has led to very good rural infrastructure development, which has permitted EPZ firms — key to Mauritius' success — to locate almost anywhere in the island.⁷⁰ Furthermore, in a small island with a limited area, it has prevented land speculation and rapidly rising land prices, as land under sugar is highly regulated and covers 40 per cent of the total area. From the ecological aspect, sugar cane harvesting clearly contributes to land conservation in an island potentially exposed to land erosion; it also permits reasonable water resource management. It requires a low use of pesticides in comparison to other food crops. Sugar cane is also highly resistant to cyclones and droughts. Another good external effect of sugar is the by-production of molasses and above all bagasse, which is used for the production of green energy and will soon cover 40 per cent of the energy needs of the country, thus nearly halving its energy import bill. This is particularly important in a SIDS like Mauritius because these countries usually face trade deficits; moreover, their insularity limits, or even deters, many interconnectivity links such as the energy ones (e.g. electricity or gas imports are not possible).

Other important exports

We briefly describe here some other agricultural exports of Mauritius, which are much less important in value than sugar, and among which the sole fairly important and growing sub-sector is tuna processing. In 2001, it represented 63 per cent of all non-sugar food exports (table 8).

In addition to non-processed (fresh, chilled or frozen) fish and seafood products for an amount of 15-20 million Mauritian rupees a year (representing several tens of tonnes), the fisheries industry's interests in Mauritius concern canned tuna,⁷¹ the exports of which increased rapidly in the 1990s. Revenue from tuna rose rapidly, from less than 300 million Mauritian rupees at the beginning of the decade to nearly 1 billion Mauritian rupees by its end, and up to 1.8 billion Mauritian rupees in 2001, which represented more than 16 per cent of total food exports and 4 per cent of total domestic exports (see table 8). More than 26,000 tonnes were exported in 2001, nearly 90 per cent of which went to the United Kingdom. As for other ACP exporting countries, Mauritius canned tuna enters the EC duty- and quota-free, hence benefiting from a preferential margin of 24 per cent per cent over Asian competitors. Given an export unit price of 70 Mauritian rupees, this margin was considered decisive for Mauritian exports in 2001.⁷² One of the current problems faced by tuna processors is the paucity of tuna supplies, which have not been easy to secure during the past few years. In particular, the question of rules of origin (in which waters the fish have been caught) can hamper the increase of exports; very recently, it the EC accepted a "15% value tolerance on canned tuna exports to the EU market" for ACP suppliers, which means that Mauritian exports to the EU will be authorized to include a maximum percentage of 15 per cent of tuna not caught in Mauritian seas.⁷³

The second non-sugar agricultural export of Mauritius is **cut flowers**. With an annual average export volume of about 500 tonnes during the 1990s, Mauritius is the world's second largest exporter of anthurium cut flowers after the Netherlands, with an annual export revenue of about 130 million Mauritian rupees (table 7). But strong competition is putting downward pressure on prices. Again ACP suppliers benefit from a preferential margin of 7–12 per cent⁷⁴ in the EU market, but this does not seem to be

⁷⁰ 55% of EPZ employment is located in rural areas.

⁷¹ From tuna catches by foreign boats (under licence and paying royalties).

⁷² For the sake of comparison, in 1999 Thailand's pelagic canned products were exported for an average price of US\$ 2 (or 60 Mauritian rupees) per kg, with an export volume of 327,098 tonnes (FAO fisheries database).

⁷³ See *Le Mauricien* (local newspaper) of July 3, 2002.

⁷⁴ Depending on competitor countries and calendar year (IDS, 2001: 114).

significant as the EU is not the main destination of exports (table 9); the major market is Japan (which accounts for 41 per cent of the total). Export competitiveness is hampered by the high cost of freight. The future of this industry is viewed with pessimism unless new varieties are found (IDS, 2001).

We have already analysed **pineapple** in the earlier section on domestic interests. Its export performance was very limited during the 1990s, despite a small rise to a range of 400–700 tonnes in volume exported at the end of the decade. Hence the export revenue of pineapple rose from a few million Mauritian rupees to between 11 and 25 million Mauritian rupees. Almost all the exports go to the EU, of which France is the main market, accounting for over 80 per cent of the total. In 2001, ACP suppliers benefited from preferential margins of 4.3 per cent and 5.8 percent over South African and Thai competitors respectively. Even though this margin has been lowered, it is still useful, since the local average unit production price is about 15 Mauritian rupees per kg, equivalent to the United States' FOB import price and inferior to the EU FOB import price (15 and 21 Mauritian rupees per kg respectively, see the paragraph on domestic production). However, freight costs are high — about 42 Mauritian rupees per kg. Without government subsidies for transport costs of pineapple (reduced lately from 50 per cent to 25 per cent of the total freight cost, see section I), this would lead to a c.i.f. export price of at least 67 Mauritian rupees (more than US\$ 2), which would not be sufficiently competitive.

b) Seychelles

Seychelles' main export is canned tuna,⁷⁵ of which total exports rose from 6,921 tonnes in 1995, valued 88 million Seychelles rupees, to 41,490 tonnes in 2000 for a total value of 606 million Seychelles rupees (more than US\$ 100 million) (MAMR, 2000). In 2000, canned tuna represented 90 per cent of marine product exports, the rest being fresh and frozen fish and prawns. Marine exports are geared mainly (94 per cent in 2000) towards the EU, and they represented altogether 95–97 per cent of total exports in the 1995–2000 period.

At first glance, the net foreign exchange earnings from the fisheries sector should be much less, taking account the necessity to import frozen tuna to complement the “national” catch (mostly by foreign vessels in Seychelles waters).⁷⁶ The frozen tuna import bill in 2000 was about 233 million Seychelles rupees (i.e. one third of the gross export revenue). But it should be pointed out that the industrial tuna fish activity implies also two other sources of foreign exchange revenue. The first one consists of foreign vessels' expenditure in Port Victoria, and the second is the payment of licences for access to the Seychelles EEZ.⁷⁷ If the import component of the former is taken into account, the net revenue of both sources amounted to 170 million Seychelles rupees in 2000. Hence altogether, the total net revenue of the Seychelles fisheries sector was still about 540 million Seychelles rupees in 2000, or almost US\$ 100 million.

This export activity is said to depend on the preferential margin of 24 per cent in the EU market. As an ACP supplier, the Seychelles benefits from duty-free access to the EU market for fish and canned tuna (see above, on Mauritius). The average export unit price of canned tuna was 14.6 Seychelles rupees in 2000, or US\$ 2.6, which is slightly higher than the Mauritian price.⁷⁸

c) The Comoros

Exports in the Comoros are concentrated exclusively on agricultural products, and principally on vanilla, cloves and ylang. Their exports amounted to 3,063 million Comorian francs in 1999 (or US\$ 6 million), representing 95 per cent of total exports. Vanilla is the most important of these exports (60 per cent of the total), although its international price has been fluctuating considerably in the 1990s. The price paid

⁷⁵ All statistical information in this paragraph on Seychelles fisheries is taken from MAMR, 2000.

⁷⁶ In 1999-2000, “national” catch in this sense was about 30 000 tonnes, whereas frozen tuna imports rose to 61,000 tonnes in 1999 and to 79,000 tonnes in 2000.

⁷⁷ Total licence fees collected in 2000 amounted to 24.6 million Seychelles rupees, down from 34.7 million Seychelles rupees in 1999.

⁷⁸ See above: 70 Comorian rupees, or US\$ 2.3.

to producers was rather low (see table below), leaving all the benefits to private local dealers and to the Government (through export taxes). In 2002, the Government removed export taxes and decided to set a guaranteed floor price for producers of 5,500 Comorian francs; in addition, the entire industry has been reorganized between three groups (those producing, preparing and exporting).⁷⁹ The main export market is the EU, as the Asian and American ones are very costly to access (since in any case exports have to be sent first to Europe, which renders other destinations very expensive). The volume of vanilla exports has been increasing to 160-180 tonnes in typically good years. The Comoros' main competitor is neighbouring Madagascar, which exports much larger volumes (more than 600 tonnes), but its product is reputed to be of a lower quality. The export volumes of cloves were much less stable during the 1990s (see table below).

The recent period (1999–2001) has been one of serious political instability and crisis, with several coups, and Anjouan Island wanting to separate from the Islamic Federal Republic of the Comoros.⁸⁰ A measure of stability has been restored since 2001, but since recent statistical information was not available to the author, this analysis stops at 1999.

Main agricultural products in the Comoros: Prices and exports, 1994–1999

Products	1994	1995	1996	1997	1998	1999
Vanilla						
- Producer floor price (green vanilla)	1 250	1 350	1 250	750	1 000	1 250
- FOB export price (dry vanilla)	21 179	15 085	11 325	6 819	8 010	9 933
- Exports by value (million CF)	2 767	2 320	1 035	1 119	1 058	1 788
- Exports by volume (tonnes)	131	154	91	164	132	180
Ylang						
- Producer floor price (flower)	110	110	75-100	75-100	100-12	150
- FOB export price (essence)	20 704	19 696	17 663	16 881	18 691	23 888
- Exports by value (million CF)	930	855	645	716	793	753
- Exports by volume (tonnes)	45	43	36	42	42	32
Gloves						
- Producer floor price	190	190	75-100	150-200	225-27	1 000-1 2
- FOB export price	190	278	255	227	258	1 326
- Exports by value (million CF)	522	134	210	89	268	522
- Exports by volume (tonnes)	2 749	481	824	394	1 037	397

Sources: OCOVA, Direction générale des douanes, extracted from Kassim, (2000).

NB: Producer price in Comorian francs (CF) per kg

⁷⁹ Personal communication from the General Secretary of the Ministry of Production, during field mission.

⁸⁰ And to be "absorbed" by France, as the neighbouring Mayotte, an island of the Comorian archipelago. The French Government refused, and the crisis has been handled by the African Union (formerly known as the Organization of African Unity).

III. OPTIMAL WTO NEGOTIATIONS: MODALITIES AND SPECIAL PROPOSALS FOR SIDS

The objective of this section is to evaluate how the presently proposed modalities for pursuing the agriculture negotiations through the WTO (see Shirotori, 2002a) will interact with the agricultural sector of our three Indian Ocean SIDSs under review, taking account the results of the analysis of their main agricultural interests (both for the domestic market and for exports) discussed in section II. Special attention is given to proposals on special and differential treatment (S&DT) for developing countries, and to possible additional and specific ones for small developing economies.⁸¹ We first derived our recommendations directly from the main results observed in section II; then we compared them to the negotiating proposals of Mauritius and other SIDSs. The convergence was almost absolute, which somewhat confirmed our results. Hence we sometimes refer to these proposals and frequently use their formulations to express our conclusions.

So far only Mauritius is a member of the WTO, while Seychelles is a simple observer, and the Comoros is neither a member nor an observer. The legal context of the negotiations include paragraph 13 of the Doha Ministerial Declaration of November 2001, which calls for more operational S&DT provisions in order to meet developing countries' needs, including food security and rural development; non-trade concerns are also to be taken into account in the negotiations.⁸² Lastly, the Marrakech Decision on the possible negative effects of the reform programme on LDCs and NFDCs should be kept in mind, as it is included in the WTO Agreements, even if no operational mandatory measure has been taken so far (despite Article 16 of the AoA, which clearly calls for action by developed country members).

We now look separately at the three main dimensions of the agriculture negotiations: market access, domestic support and export subsidies, even though their implications are closely interlinked. One of the most cited examples of the possible linkage between them is that between tariff cuts and the cuts in domestic support and export subsidies, as proposed notably by CARICOM (Shirotori, 2002a). Another example, which could be of interest to SIDSs, is the following one: it is often said (WTO, 2002) that the debate over non-trade concerns leads to the question whether "green box" measures are sufficient or not to satisfy them. Some countries say they are not; for example, when rice fields are necessary to prevent soil erosion (the same applies to sugar in Mauritius, according to its officials), which leads to some *coupled* domestic support,⁸³ and to "amber box" measures, not green ones. But for countries with limited support budgets, this leads to proposals for additional or other protection means (i.e. of market access issues). It is more the developed countries that frequently focus on domestic support, when speaking about non-trade concerns.

A final example of interconnected issues, which also illustrates the complexity of the analysis, is the prospects for sugar in Mauritius (see elements discussed in section II). If the Sugar Sector Strategic Plan turns out to be a success, the worst outcome would be the strong reduction or elimination of EU subsidies, with no change concerning EU market access: this would imply a steep decline in the unit price received, with no possibility to compensate by expanding the Mauritian share in the EU market. But of course, if the plan does not succeed in sufficiently lowering the sugar production costs, then it would be preferable for Mauritius if access to the EU sugar market (through the Sugar Protocol) were left unchanged in the long run, or not being displaced by non-preferential exporters. We return to this issue in the next section.

⁸¹ In paragraph 35 of the Doha Ministerial Declaration, the members "agree to a work programme, under the auspices of the General Council, to examine issues relating to the trade of small economies. The objective of this work is to frame responses to the trade-related issues identified for the fuller integration of small, vulnerable economies into the multilateral trading system, and not to create a sub-category of WTO Members. The General Council shall review the work programme and make recommendations for a decision to the Fifth Session of the Ministerial Conference". This decision followed many initiatives and proposals from Mauritius and other small economies and SIDS (see Salmon, 2002).

⁸² The exact formulation was: "We agree that special and differential treatment for developing countries shall be an integral part of all elements of the negotiations and shall be embodied in the schedules of concessions and commitments and as appropriate in the rules and disciplines to be negotiated, so as to be operationally effective and to enable developing countries to effectively take account of their development needs, including food security and rural development. We take note of the non-trade concerns reflected in the negotiating proposals submitted by Members and confirm that non-trade concerns will be taken into account in the negotiations as provided for in the Agreement on Agriculture".

⁸³ Income in exchange for rice field exploitation and hence production.

III.1 Market access

Like many other SIDSs in the Uruguay Round (UR) negotiations, Mauritius chose to bind its agricultural tariffs at a level exceeding 100 per cent (actually 122 per cent), and so is not required to offer tariff reductions during the implementation period. It thus has not reserved the right to apply the special safeguard (SSG) provision and similarly it opened no TRQ. In general the bound rates chosen by Mauritius appear to be sufficiently high (see section II) (i.e. the applied tariffs can be raised to bound ones in case of an import surge threatening local production. However, they may not always be effective if the international price of the product concerned is highly unstable or reaches very low levels (Mamaty, 2002).

Furthermore, there are some special cases where the import of agricultural products in Mauritius, such as potatoes, onions and sugar, are highly regulated, for example through the operations of a STE (or a private entity in the case of sugar), seasonal import bans and import licensing. These complex devices are not illegal *per se*; Article XVII of the GATT 1947 on STEs, and its 1994 Understanding, do not ban STEs, but rather affirm that any STE shall conduct its operations in a non-discriminatory way and with considerable transparency (through rigorous notification procedures).⁸⁴ As for the AoA, Article 4 (in its paragraph 2) on market access requires members to “not maintain, resort to or revert to any measures of the kind of which have been required to be converted into ordinary customs duties, except as otherwise provided for in Article 5 and Annex 5.”⁸⁵ This was at the origin of the tariffication process. But as already mentioned, many developing countries, among them SIDSs, have preferred to avoid it and have chosen to bind their tariffs at high levels instead. In that case, what should become of their NTBs? We refer to Annex 5 of the AoA, which provides special treatment with respect to paragraph 2 of Article 4. The provisions of this paragraph shall not apply to any primary agricultural product in respect of which some listed conditions are applied.⁸⁶ It appears that these conditions are quite restrictive (with regard to these conditions, outlined in footnote 86, it is necessary to clarify what a “predominant staple in a traditional diet” means) and some efforts should be made to enlarge them, such as proposing a new S&DT measure for all developing countries or for SIDSs/small economies. Actually it could be argued that a STE, or a private single export body, is helpful for mitigating the negative impacts of the numerous natural constraints which beset SIDSs, among which the very small size of their operators (many smallholding farmers have to trade in commodities with big multinationals, for example). The presence of such a body could ensure that the quota rent goes to producers (e.g. MSS), instead of being captured by dealers (as has been the case since the partial liberalization of potato imports in Mauritius, see above).

The case of Seychelles is similar in some ways to that of Mauritius, with a more interventionist STE and some reasonable tariffs combined with quantitative import restrictions. It also allows for a much greater degree of potential distortion and discretion by the Government (see sub-section III.2 below). Hence if Seychelles were to become a member of the WTO, the national issues on the basis of which the modalities for the negotiations would be selected could well resemble those of Mauritius, particularly with regard to tariff preference issues and the export interests relating to canned tuna.

The Comorian case is simpler: it has already liberalized its market access conditions through structural adjustment programmes, so that tariffs are rather low and NTBs are almost non-existent. But its economic

⁸⁴ For the smallest SIDS, such as Seychelles, it is therefore the costs of WTO compliance rather than the existence of the STE *per se* which could become the main issue.

⁸⁵ This concerns NTBs such as quantitative import restrictions, discretionary import licensing, non-tariff measures maintained through STEs as listed in footnote 1 of the paragraph.

⁸⁶ These conditions are listed separately in sections A and B. The former concerns products (a) the imports of which comprised less than 3 per cent of corresponding domestic consumption in the base period 1986-88, (b) that received no export subsidies, (c) to which effective production-restrictive measures are applied. These three conditions (among the five listed) seem enough to disqualify sugar, potatoes and onions in Mauritius. Section B refers to agricultural products that are the “predominant staple” in the traditional diet of a developing country member. In order to qualify a product, the developing country should be given appropriate minimum market access opportunities both for that product (as specified in Section B, paragraph 7a of annex 5) and for other products under the AoA. Onions and potatoes could well qualify here, provided they can be rightly considered as predominant staples in Mauritius’ traditional diet, which remains to be seen. Any negotiation on the question of whether there can be a continuation of this special treatment after the end of the implementation period shall be initiated and completed within this period itself (paragraph 8).

development will depend largely on the growth of its agriculture, which might well require a degree of freedom to pursue its own agricultural policy, including the use of non-WTO-compatible protection measures. In this context, owing to its LDC status, there should be as much flexibility as possible.

It thus appears from this analysis, that in the interests of the three countries concerned, it would be preferable that the modalities for tariff rate reductions be based on the UR final bound rates, using a UR formula which authorizes some lower EU tariff reductions for “preferential” products such as canned tuna.

Furthermore, it is in the interest of Mauritius to preserve the duty-free quota access for its sugar on the EU market provided by the Sugar Protocol. It should continue to defend this by evoking historical trade preferences, non-trade concerns (see section II, concerning the multifunctional role of sugar in Mauritius), the natural handicaps confronting SIDSs/small economies and the fact that it is a single-commodity producer,⁸⁷ at least until the unit cost of production of sugar in Mauritius has been reduced to its long-term competitive objective. This leads to the following principles or propositions:

- SIDSs should be provided with security of access for the one or two commodities they are able to produce on a commercial basis.
- Non-reciprocal preferential tariff rates provided to developing countries, in particular SIDSs, in the agricultural sector should be improved and bound under the framework of the AoA.
- Any review of the administration of TRQs should not have a negative impact, but rather a positive one, on terms and conditions of current market access for SIDSs or other single-commodity producers/small developing economies.⁸⁸
- These modalities in the negotiations on market access should at the same time authorize as much flexibility as possible with regard to developing countries’ (or SIDSs/small developing countries) commitments, in order to leave them some degrees of leeway in their future agricultural policy.
- In SIDSs, unlike OECD countries, local financial resources to support local production are often lacking (whatever the colour of the boxes used). Thus market access commitments by resource-poor countries and SIDSs should remain limited. Provision of a degree of flexibility in this respect would include some renewed agreement on NTBs (which presently play an important role in Mauritius and Seychelles, as described above). Alternatively SIDSs could be granted the possibility of excluding their very sensitive products from market access commitments and from a reduction in eventual domestic support and export subsidies.
- A new SSG for developing countries (or rather, specifically SIDSs) would also be welcome, to be used whenever necessary to protect their local producers.

III.2 Domestic support

Mauritius does not belong to the list of 30 countries that have included (“amber box”) subsidies in their schedule (and hence are allowed to use them under the terms of agreed reduction commitments). Similar to all sub-Saharan Africa countries, except South Africa (Mamaty, 2002), Mauritius reported a zero-base total aggregate measurement of support (AMS) in its country schedule. And for such countries there is no possibility of introducing new non-exempt subsidies unless they fall under the *de minimis* category (or S&DT category, see Mamaty, 2002).

The AMS has not been calculated in Mauritius, but is believed to be inferior to the *de minimis* limit of 10 per cent for developing countries (see below). Major agricultural subsidies have been eliminated in

⁸⁷ See both Negotiating Proposals by Mauritius (WTO, 2000b) and SIDS (WTO, 2000a).

⁸⁸ The question of the price of sugar will be treated in the sub-section on export subsidies.

recent years. In fiscal year 2001/02, the Government spent 105 million Mauritian rupees in support to the agricultural sector, that was over an ex-ante budget of 80 million Mauritian rupees, of which 50 million Mauritian rupees were managed by the Ministry of Agriculture, and the remainder through credit subsidies from the (publicly owned) Development Bank of Mauritius. The latter are provided for different agricultural projects and purposes (e.g. irrigation, mechanization, land preparation and plantation, and chill rooms) in the sugar and non-sugar sector. This needs to be compared to a gross agricultural output of 9.7 billion Mauritian rupees in 2000 (at basic prices, probably inferior to the 2001 one): thus the internal public support probably amounts to around 1 per cent of output, which amply qualifies for the *de minimis* provision.

Furthermore, our analysis has not found any significant evidence of agricultural products in our Indian Ocean SIDSs that could be potentially harmed by domestic support of agriculture in OECD countries. Nor do these SIDSs give strong domestic support to their farmers. Hence they could well afford to push for a reduction of domestic support in the context of the current AoA negotiations in WTO. But at the same time, they need to think of their future needs, when it might become necessary for support to be given to new agricultural sub-sectors in order to develop or diversify their agriculture.

We can therefore conclude with caution that the best approach in terms of negotiating domestic support modalities, from the point of view of Mauritius, Seychelles and the Comoros, appears to be similar to that of the “African Group” which calls for substantial reduction of *actual* domestic support⁸⁹ by developed countries and more flexibility for developing countries to address food security or rural development issues, in case of future need. One possibility is to raise the *de minimis* level in a new S&DT approach, for all developing countries or for small developing economies, even if this does not yet seem necessary in our three country cases. Mamaty (2002) warns that, according to many observers, including the FAO (2001a), “*past experience in agricultural development suggests that it is achieved through a judicious mix of subsidies, pricing policies and border measures, as well as other institutional and infrastructural support measures (...) and that coupled measures have been more effective in rapidly rising agricultural productivity and production than decoupled ones.*” The second best choice would be to follow the “cautious group” line of reduction of domestic support as agreed in the UR with maintenance (or a cautious extension) of the “green box”, which could well serve (at least partially) non-trade concerns in the future. Finally, in the case of SIDSs, it would be wise to extend the “green box” list of measures to privately funded ones, as is the case in Mauritius with the operations of the MSS. Also, it would be helpful to relax the conditions for exceptional support in case of natural disasters, as the existing ones are quite restrictive and SIDSs may not always qualify (see our section I and footnote 6).

III.3 Export subsidies

Like all sub-Saharan African countries, except South Africa (Mamaty, 2002), Mauritius and many other SIDSs have not reported any use of agricultural export subsidies in their schedule. This means that they will not be allowed to use them in the future, except for those allowed in the following Agreements:

- Article 9.4 of the AoA exempts subsidies for marketing, processing and transport from prohibition in developing countries. This could be helpful in case of high transport costs, as experienced by SIDSs. Mauritius is using this exemption for several exports, mainly pineapple (see above). But the exemption given refers to the implementation period only (until 2004 for developing countries); it should thus be extended in time.
- Article 6.2 of the AoA exempts (from reduction commitments) both investment subsidies, and agricultural input subsidies for low-income and resource-poor

⁸⁹ Actual annual levels of AMS in OECD countries are far below annual current total AMS values provided in the country schedules. Despite the reduction commitments, actual domestic support in OECD countries remains high (Mamaty, 2002).

producers in developing country members. It should not be required to include these subsidies in the calculation of the AMS,

- More generally, under the Agreement on Subsidies and Countervailing Measures (ASCM) (Article 27.2a and annex VII), the prohibition of export subventions does not concern LDCs or countries with a GNI per capita below US\$ 1000. Other developing countries benefit from an eight-year (1994–2002) waiver, and must comply with strict WTO conditions and procedures if they want to continue to provide export subsidies (Salmon, 2002).

Generally speaking, developing countries have been calling for the elimination of export subsidies from OECD countries, especially for those affecting products of interest to them. But, as mentioned above, in the domestic support case, our analysis did not find any significant evidence of agricultural activities in the Indian Ocean SIDSs that are potentially harmed by OECD countries' export subsidies in agriculture.⁹⁰ Nor do they themselves give significant export subsidies to their farmers. But there is a crucial difference here: sugar producers in Mauritius received huge export subsidies thanks to the combination of the Sugar Protocol and the EU sugar regime (see section II). Mauritian negotiators are therefore understandably defensive in the WTO discussions about export subsidies, and of course they will be in favour of any formula which permits a delay or reduction of EU internal sugar price adjustment⁹¹ (provided the EC itself does not want to go faster and deeper in the adjustment, which is a reasonable assumption). This price has already declined significantly in real terms (see section II). Furthermore, if there were a rapid elimination of export subsidies in OECD countries, including the EU, Mauritius could well be hurt twice: first, it would lose the benefits of the high price of sugar, and secondly, as with other NFIDCs, its net food import bill would rise further. Mauritius thus has much to lose on the export subsidies issue. While waiting for the main elements of reform of the EU's sugar regime (in early 2003), it would be helpful to progress towards an agreement on a prolongation of the peace clause, due to end in 2003, at least as long as the agriculture reform process is under way.

Hence the optimal modalities for export subsidy negotiations would be, from the point of view of Mauritius and Seychelles, and perhaps also the Comoros,⁹² those which avoid a rapid substantial reduction of export subsidies by OECD countries, and which allow more flexibility for their agricultural export policy, including the extension of Article 9.4, both in time and beyond the sole provisions of Article 9.1(d) and (e). These should go together with implementation of compensation measures for NFIDCs.

Finally, it should be reiterated that small islands should continue to base their requests in WTO negotiations on agriculture as well as in any other trade negotiations (including those on free trade agreements) on their specific needs as SIDSs or small economies, and try to obtain some specific rights (e.g. extension of the S&DT provided to LDCs in Article 15 of the AoA⁹³, as well as of Annex VII of the ASCM⁹⁴) or any new rights, such as the right to implement a specifically designed internal tax regime, or the right to maintain non-reciprocity for strategic products in FTAs with developed countries (see Salmon, 2002).

⁹⁰ Except perhaps for the import of rice in the Comoros, which may displace local production of food crops, an issue that could be easily handled with a higher tariff or an adjustment of government policy (through the operations of ONICOR, the STE in charge of basic rice imports).

⁹¹ Avoiding, for example, the down payment in the first year plus an accelerated process of reduction, as suggested by the Cairns Group with India, the Democratic Republic of the Congo and Poland (Shirotori, 2002a).

⁹² But there is the risk of its continuing to hurt local production in the latter country, if it is not adequately protected.

⁹³ Which exempts LDCs from reduction commitments in agriculture.

⁹⁴ Which exempts LDCs from prohibition of export subsidies.

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ANNEX**ANNEX I – List of meetings and participants***Geneva***Tuesday, 18 June, 2002***Permanent Mission of the Republic of Mauritius :*

H.E. Ambassador J. Meetoo
 G. Govinden, Representative of both Mauritius Chamber of Agriculture and
 Mauritius Sugar Syndicate
 U. Dwarka-Canabady, Minister-Counsellor and Deputy Permanent Representative
 G. Rajpati, Executive Director of the Mauritius Sugar Authority.

Wednesday, 19 June 2002*UNCTAD, Division on International Trade in Goods and Services, and Commodities (DITC).*

Miho Shirotori, Project Manager
 O. Matringe, Economic Affairs Officer, Commodity Information, Risk Management
 and Finance, and manager of the InfoCom website.
 M. Arda, Officer-in-Charge, Commodities Branch.
 M. Tortora, Coordinator, Commercial Diplomacy

WTO

M. Fall, Economic Affairs Officer, Agriculture and Commodities Division

Mauritius Chamber of Commerce and Industry Office for Europe

J-C Montocchio, Director

Thursday 20th, June 2002*UNCTAD*

B. Graham and S. Laird, Trade Analysis Branch, DITC
 Ph. Hein, former staff member in the Office of the Special Coordinator for Least Developed,
 Landlocked and Island Developing Countries⁹⁵

*Mauritius***Thursday, 4 July 2002***Indian Ocean Commission, Quatre Bornes*

Erik Van Overtraeten, conseiller principal,
 Raj Mohabeer, chargé de mission
 Siti Soifiat Alféine, assistante technique régionale

⁹⁵ His successor, P. Encontre, not present during that period.

Friday 5 July 2002

Ministry of Industry and International Trade (International Trade Division), Port Louis
N. Boodhoo

The Mauritius Chamber of Agriculture, Port Louis

J-N. Humbert, General Secretary

J-C Monty, Officer-in-Charge of Diversification, Natural Resources and Environment Service

L Law Toon Fong, Supporting Officer for Legal and International Affairs

The Mauritius Sugar Authority, Port Louis

Dr. G. Rajpati, Executive Director.

Miscellaneous

M. Hardy, former Director of the Mauritius Sugar Syndicate, Port Louis

Monday 8 July 2002

Central Statistical Office (CSO), Port Louis

H Bundhoo, Director of Statistics

G Vydelingum, Principal Statistician

Agricultural Research and Extension Unit (AREU), Quatre Bornes

Mr Ramnauth, biometrician

Tuesday 9 July 2002

Central Statistical Office

G. Vydelingum, Principal Statistician

Mr. Seenauth, Agricultural Division

Mrs N. Joomun, External Trade Division

Thursday 11 July 2002

Customs and Excise Department, Port Louis

S Gunnoo, General Director

G Chung Kam Chung, Acting Deputy Controller of Customs

Agricultural Marketing Board (by phone)

Mr Nillaya, Officer-in-Charge of "controlled products" (by phone)

Ministry of Industry and International Trade (Trade Policy Unit), Port Louis

A Bhuglah, Officer-in-Charge (WTO expert)

Friday 12 July 2002

Indian Ocean Commission House,

H. Idaroussi, General Secretary, Ministry of Production, the Comoros

S. Mdziani, Regional Director of the DECVAS project, the Comoros

ANNEX II – Tables

Table 1 : Major non-sugar agricultural products in Mauritius, gross output (quantities in tonnes and values in Rs'000), 1991-2000 (domestic market)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	g91-95 (%)	g96-00 (%)
Banana												
production	6490	8530	9880	6725	9437	9387	9557	9343	7550	8500	9.8	-2.5
value							35170	31392	33739	36557		
a.u.p (Rs/kg)							3,7	3,4	4,5	4,3		
Pineapple												
production	1480	2300	4048	3887	4199	2973	1559	1462	1014	3416	29.8	3.5
value							23230	20029	15281	49139		
a.u.p (Rs/kg)							14,9	13,7	15,1	14,4		
Onion												
production	2960	3240	3637	5403	5974	6067	5036	6727	9066	11134	19.2	16.4
value							41337	55128	74296	103365		
a.u.p (Rs/kg)							8,2	8,2	8,2	9,3		
Carrot												
production	915	1250	2188	2624	3131	3141	4878	3363	6127	11461	36.0	38.2
value							59448	48826	74670	147362		
a.u.p (Rs/kg)							12,2	14,5	12,2	12,9		
Tomato												
production	9385	10220	13001	9166	13486	10877	12226	10729	8037	9719	9.4	-2.8
value							207879	233061	151892	210140		
a.u.p (Rs/kg)							17	21,7	18,9	21,6		
Potato												
production	16445	19175	13780	17800	15718	10639	17584	14612	15322	13843	-1.1	6.8
value							113904	95372	91932	114900		
a.u.p (Rs/kg)							6,5	6,5	6	8,3		
Poultry												
production	13250	15500	17000	18850	19235	20550	20825	18300	20900	25600	9.9	5.6
value							690800	709300	794200	921850		
a.u.p (Rs/kg)							33,2	38,8	38	36		
Tea (green leaf)												
production	30863	30379	30900	27204	21419	13209	9026	7393	7134	6440	-8.7	-16.4
value	78900	122400	117000	102000	80000	79000	61000	66000	64400	64400		
a.u.p (Rs/kg)							6,8	8,9	9	10		

Source: CSO, Agriculture unit

g=average annual growth rate

a.u.p. means average unit price (to be taken with great care, as several product lines are aggregated and prices are subject to high season variations).

Table 2 : Major non-sugar agricultural products in Mauritius, ratio (%) of imports to domestic output (quantities in tonnes), 1991-2000 (domestic market)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Banana										
fresh or dried										
production (1)	6490	8530	9880	6725	9437	9387	9557	9343	7550	8500
imports (2)	0	0	0	0	0	0	0	0	0	0
ratio (2)/(1)	0	0	0	0	0	0	0	0	0	0
Pineapple										
fresh or dried										
production (1)	1480	2300	4048	3887	4199	2973	1559	1462	1014	3416
imports (2)	0	0	0	0	0	0	0	0	0	0
ratio (2)/(1)	0	0	0	0	0	0	0	0	0	0
Onion										
fresh or chilled										
production (1)	2960	3240	3637	5403	5974	6067	5036	6727	9066	11134
imports (2)	4777	4251	5580	5508	4768	5488	6203	7125	9296	7776
ratio (2)/(1)	161,4	131,2	153,4	101,9	79,8	90,5	123,2	105,9	102,5	69,8
Carrot										
fresh or chilled										
production (1)	915	1250	2188	2624	3131	3141	4878	3363	6127	11461
imports (2)	0	0	0	0	0	0	0	51	221	41
ratio (2)/(1)	0	0	0	0	0	0	0	1,5	3,6	0,4
Tomato										
fresh or chilled										
production (1)	9385	10220	13001	9166	13486	10877	12226	10729	8037	9719
imports (2)	0	0	0	0	0	0	0	0	0	0
ratio (2)/(1)	0	0	0	0	0	0	0	0	0	0
Potato										
fresh or chilled										
production (1)	16445	19175	13780	17800	15718	10639	17584	14612	15322	13843
imports (2)	8155	7216	7610	6297	9485	11525	11558	10150	7986	8168
ratio (2)/(1)	49,6	37,6	55,2	35,4	60,3	108,3	65,7	69,5	52,1	59
Poultry										
see NB										
production (1)	13250	15500	17000	18850	19325	20550	20825	18300	20900	25600
imports (2)	930	926	330	0	0	0	0	553	78	0
ratio (2)/(1)	7	6	1,9	0	0	0	0	3	0,4	0
Green tea										
production (1)	30863	30379	30900	27204	21419	13209	9026	7393	7134	6440
imports (2)	0	0	0	0	0	0	0	13	0	0
ratio (2)/(1)	0	0	0	0	0	0	0	0,2	0	0

Source: CSO, external trade statistics for imports (in italics) ; and agriculture unit (from table 1) for production. Ratios: author's calcul
NB: product coverage of production may differ from the import one,

- imports of onions exclude onion seeds, whereas imports of potatoes include seed potatoes. In both cases production include seeds.
- imports of poultry includes five HS Code lines (02701100 to 02071400 plus 02072100)

Table 3 : Main source of imports of fresh or chilled potatoes (other than seed potatoes) and onions, Mauritius, 2000

HS	DESCRIPTION	Country of origin	Quantity (Kg)	CIF Value (Rs)	Market share* av. CIF price (Rs/kg)
07019000	Potatoes, fresh or chilled	AUSTRALIA	3 016 300	27 755 077	43
07019000	Potatoes, fresh or chilled	FRANCE	500	5 134	0,007
07019000	Potatoes, fresh or chilled	INDIA	1 951 910	14 018 105	27,8
07019000	Potatoes, fresh or chilled	NEW ZEALAND	27 300	210 568	0,4
07019000	Potatoes, fresh or chilled	SOUTH AFRICA	2 024 955	18 621 983	28,8
07019000	Total		7 020 965	60 610 867	100
07031000	Onions and shallots, fresh or chilled	AUSTRALIA	530	5 603	0,007
07031000	Onions and shallots, fresh or chilled	EGYPT	104 000	943 865	1,3
07031000	Onions and shallots, fresh or chilled	INDIA	6 619 984	43 211 103	85,1
07031000	Onions and shallots, fresh or chilled	SOUTH AFRICA	1 051 110	9 319 296	13,5
07031000	Total		7 775 624	53 479 867	100

Source: CSO

* based on quantity supplied

Table 4 : Tariff Regime of main agricultural non sugar products, Mauritius 2001

HS CODE	Description	WTO bound tariff rate	Rate of Customs Duty	NWGT (KG)	CIF (Rs)	av. CIF price (Rs/kg)	Customs Duty	Effective rate
02071100	Meat of gallus domesticus fowls not cut in pieces, fresh or chill	122	80	216	25014	115,8	20010	80
02071200	Meat of gallus domesticus fowls not cut in pieces, frozen	122	80	9907	611151	61,7	488920	80
02071300	Cuts and offal of gallus domesticus fowls, fresh or chill	122	80	34	9098	267,6	7278	80
02071400	Cuts and offal of gallus domesticus fowls, frozen	122	80	56624	1850661	32,7	746649	40
07019000	Potatoes other than seed potatoes, fresh or chilled	37	0	8795828	74298924	8,4	-	-
07020000	Tomatoes, fresh or chilled	122	15	7	74	10,6	-	-
07031000	Onions and shallots, fresh or chilled	37	15	8527380	66147341	7,8	9845117	15
07061000	Carrots and turnips, fresh or chilled	122	15	6845	191482	28	28236	15
08030000	Bananas, including plantains, fresh or dried	82	40	18	1790	99,4	716	40
08043000	Pineapples, fresh or dried	122	40	82	5877	71,7	2351	40
09021000	Green Tea (not fermented), in packing not exceeding 3 kg	82	40	792	377604	476,8	151042	40
09022000	Green Tea (not fermented), in packing exceeding 3 kg	82	40	3178	253310	79,7	101324	40
09023000	Black Tea (not fermented), in packing not exceeding 3 kg	82	40	4877	882078	180,9	157297	18
09024000	Black Tea (not fermented), in packing exceeding 3 kg	82	40	3562	302241	84,9	119092	39

Source: Customs and WTO Country Schedule (CXVIII Mauritius), author's calculs

Table 5 : Food Import Bill, Mauritius, 1991- 2001

Value : Million Rupees

SITC section/description	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
0 - Food and live animals	2 692	2 915	3 744	4 241	4 673	5 845	6 091	6 826	6 761	6 948	8 235
Meat and meat preparations	361	380	420	559	540	577	683	733	629	697	740
Dairy products and bird's eggs	547	597	668	766	849	947	964	1 038	1 092	1 072	1 318
Fish and fish preparations	240	211	375	488	635	689	867	1 113	793	1 058	1 754
Wheat	114	197	288	359	379	599	367	504	488	496	525
Rice	314	276	464	398	329	668	506	556	764	660	620
Wheaten flour	76	53	45	11	3	85	73	114	-	-	198
Cereal preparations	104	130	135	173	165	192	221	235	248	261	298
Vegetables and fruits	370	383	470	523	532	695	804	850	951	932	990
Other	566	688	879	964	1 241	1 393	1 606	1 683	1 796	1 772	1 792
1 - Beverages and tobacco	113	132	151	201	221	212	262	312	527	369	364
Beverages	99	117	131	177	196	191	228	275	437	300	270
Tobacco & tobacco manufactures	14	15	20	24	25	21	34	37	90	69	94

NB: 2000 revised and 2001 provisional

Table 6 : Macroeconomic Food Balance, Mauritius, 1991 - 2001

Year	Value : Million Rupees				Food Trade Balance (excluding sugar)*	Food Trade Balance (including sugar)**
	Total exports (F.O.B) Value	Sugar exports (F.O.B) Value)	Non sugar exports (F.O.B Value)	Total Imports (C.I.F Value)		
1991	5 932	5 298	634	2 692	-2 058	3 240
1992	6 512	5 841	671	2 915	-2 244	3 597
1993	6 681	5 770	911	3 744	-2 833	2 937
1994	6 970	5 873	1 097	4 241	-3 144	2 729
1995	7 702	6 543	1 159	4 673	-3 514	3 029
1996	9 836	8 347	1 489	5 845	-4 356	3 991
1997	9 192	7 495	1 697	6 091	-4 394	3 101
1998	10 618	8 907	1 711	6 826	-5 115	3 792
1999	9 165	7 599	1 566	6 761	-5 195	2 404
2000	7 201	5 544	1 657	6 948	-5 291	253
2001	10 975	8 138	2 837	8 235	-5 398	2 740

Source: CSO external trade statistics, related to HS Code Section 0 (food and live animals)

* columns IV - V ; ** columns II - V

Table 7 : Main 'domestic' exports of food products, Mauritius, 1991 - 2001 (quantity in tonnes and value in Million Rupees (FOB)

(source: CSO, external trade statistics and author's own calcs)

HS	Description	1991		1992		1993		1994		1995	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
06031000	Fresh cut flowers and buds for bouquet or ornamental purpose	480	87	501	93	583	112	568	111	596	134
08043000	Pineapples, fresh or dried	92	2	343	5	321	7	132	3	296	6
09021000	Green tea (not fermented) in packing not exceeding 3 kg	1 992	37	893	16	-	-	-	-	-	-
09022000	Green tea (not fermented) in packing exceeding 3 kg	142	3	82	1	-	-	161	3	-	-
09023000	Black tea (fermented or partly fermented) in packing not exceeding 3 kg	2 160	39	4 360	75	4 138	96	2 611	50	2 839	47
09024000	Black tea (fermented or partly fermented) in packing exceeding 3 kg	201	4	82	2	196	7	1 257	30	55	4
16041400	Prepared or preserved tuna, skipjack and atlantic bonito	6 747	297	7 380	289	7 779	377	8 879	479	12 271	596
17011100	Raw cane sugar, in solid form, not flavoured or coloured	551 442	5 298	597 401	5 674	539 984	5 822	518 784	5 866	523 890	6 326

HS	Description	1996		1997		1998		1999		2000	
		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
06031000	Fresh cut flowers and buds for bouquet or ornamental purpose	579	133	603	127	555	131	457	117	472	127
08043000	Pineapples, fresh or dried	255	5	352	8	475	14	758	25	438	11
09021000	Green tea (not fermented) in packing not exceeding 3 kg	-	-	-	-	-	-	-	-	-	-
09022000	Green tea (not fermented) in packing exceeding 3 kg	-	-	9	1	5	1	5	1	4	1
09023000	Black tea (fermented or partly fermented) in packing not exceeding 3 kg	1 208	22	230	6	126	4	9	2	8	1
09024000	Black tea (fermented or partly fermented) in packing exceeding 3 kg	159	5	279	5	80	5	32	5	27	3
16041400	Prepared or preserved tuna, skipjack and atlantic bonito	13 082	703	15 136	872	12 625	935	14 921	946	18 006	954
17011100	Raw cane sugar, in solid form, not flavoured or coloured	612 524	8 347	575 308	7 495	602 072	8 907	533 834	8 009	424 312	5 539

av. annual growth (value, %)

unit price (Rs/kg)

HS	Description	2001		1991-95		1996-00	
		Quantity	Value	1991-95	1996-00	1991-95	1996-00
06031000	Fresh cut flowers and buds for bouquet or ornamental purpose	496	132	11,4	-1,1	266,13	
08043000	Pineapples, fresh or dried	505	19	31,6	21,8	37,62	
09021000	Green tea (not fermented) in packing not exceeding 3 kg	-	-	ns	-	-	
09022000	Green tea (not fermented) in packing exceeding 3 kg	7	1	ns	nc	142,86	
09023000	Black tea (fermented or partly fermented) in packing not exceeding 3 kg	21	4	4,8	-53,8	190,48	
09024000	Black tea (fermented or partly fermented) in packing exceeding 3 kg	10	1	0	-12	100	
16041400	Prepared or preserved tuna, skipjack and atlantic bonito	26 802	1 796	19	7,9	67,01	nc=non computable
17011100	Raw cane sugar, in solid form, not flavoured or coloured	599 422	8 138	4,5	-9,7	13,58	ns=non significant (-100%)

Table 8 : Shares of main agricultural exports, Mauritius, 1991-2001

Year	Sugar Exports (FOB, Mn Rs)	Cut flowers Exports (FOB, Mn Rs)	Fresh pineapple Exports (FOB, Mn Rs)	Prep. or preserv. Tuna Exports (FOB, Mn Rs)	Non sugar food* exports (F.O.B Value)	Total food* exports (F.O.B) Value	Total domestic Exports (Mn Rs)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1991	5 298	87	2	297	634	5 932	18 084
1992	5 841	93	5	289	671	6 512	19 685
1993	5 770	112	7	377	911	6 681	22 443
1994	5 873	111	3	479	1 097	6 970	23 196
1995	6 543	134	6	596	1 159	7 702	25 786
1996	8 347	133	5	703	1 489	9 836	30 776
1997	7 495	127	8	872	1 697	9 192	31 888
1998	8 907	131	14	935	1 711	10 618	37 762
1999	7 599	117	25	946	1 566	9 165	37 705
2000	5 544	127	11	954	1 657	7 201	37 609
2001	8 138	132	19	1 796	2 837	10 975	42 474

Source: CSO, external trade statistics ; * all HS Code section 0 ("food and live animals")

Year	Share of sugar in total food exports (%)	Share of cut flowers in total food exports (%)	Share of pineapples in total food exports (%)	Share of prec. tuna in total food exports (%)	Share of sugar in TOTAL DOMESTIC exports (%)	Share of cut flowers in TOTAL DOMESTIC exports (%)	Share of pineapples in TOTAL DOMESTIC exports (%)	Share of prec. tuna in TOTAL DOMESTIC exports (%)
	(8)=(1)/(6)	(9)=(2)/(6)	(10)=(3)/(6)	(11)=(4)/(6)	(12)=(1)/(7)	(13)=(2)/(7)	(14)=(3)/(7)	(15)=(4)/(7)
1991	89,3	1,5	0,03	5	29,3	0,5	0,01	1,64
1992	89,7	1,4	0,08	4,4	29,7	0,5	0,03	1,47
1993	86,4	1,7	0,1	5,6	25,7	0,5	0,03	1,68
1994	84,3	1,6	0,04	6,9	25,3	0,5	0,01	2,07
1995	85	1,7	0,08	7,7	25,4	0,5	0,02	2,31
1996	84,9	1,4	0,05	7,1	27,1	0,4	0,02	2,28
1997	81,5	1,4	0,09	9,5	23,5	0,4	0,03	2,73
1998	83,9	1,2	0,13	8,8	23,6	0,3	0,04	2,48
1999	82,9	1,3	0,27	10,3	20,2	0,3	0,07	2,51
2000	77	1,8	0,15	13,2	14,7	0,3	0,03	2,54
2001	74,2	1,2	0,17	16,4	19,2	0,3	0,04	4,23

Table 9: major destinations of main agricultural export, Mauritius, 2001

HS CODE	DESCRIPTION	COUNTRY OF DESTINATION	QUANTITY (KG)	F.O.B VALUE (RS)	share of total value (%)
06031000	Fresh cut flowers	JAPAN	133 177	54 465 664	41,1
06031000	Fresh cut flowers	ITALY	155 668	29 667 529	22,4
06031000	Fresh cut flowers	FRANCE	63 743	17 789 873	13,4
06031000	Fresh cut flowers	AUSTRALIA	41 045	7 039 905	5,3
06031000	Fresh cut flowers	HONG KONG	17 876	5 922 519	4,5
06031000	Fresh cut flowers	UNITED STATES	15 714	4 760 227	3,6
06031000	Fresh cut flowers	TAIWAN	5 492	1 944 484	1,5
06031000	Fresh cut flowers	UNITED ARAB EMIRATES	3 875	1 944 446	1,5
06031000	Fresh cut flowers	REUNION	33 280	1 804 147	1,4
06031000	Fresh cut flowers	miscellaneous	25 896	7 094 049	5,4
06031000	Total		495 766	132 432 843	100
08043000	Pineapples, fresh or dried	FRANCE	428 662	15 576 698	83,5
08043000	Pineapples, fresh or dried	ITALY	31 292	1 526 535	8,2
08043000	Pineapples, fresh or dried	BELGIUM	15 350	520 714	2,8
08043000	Pineapples, fresh or dried	UNITED KINGDOM	11 300	395 500	2,1
08043000	Pineapples, fresh or dried	SWITZERLAND	13 536	390 534	2,1
08043000	Pineapples, fresh or dried	miscellaneous	4 620	255 293	1,4
08043000	Total		504 760	18 665 274	100
09021000	Green tea (not fermented) in packing not ex	FRANCE	20	1 229	12,6
09021000	Green tea (not fermented) in packing not ex	SEYCHELLES	10	8 500	87,4
09021000	Total		30	9 729	100
09022000	Green tea (not fermented) in packing excee	JAPAN	7 000	995 165	100
09022000	Total		7 000	995 165	100
09023000	Black tea (fermented or partly fermented) in	FRANCE	16 088	2 924 722	77,5
09023000	Black tea (fermented or partly fermented) in	REUNION	4 642	699 341	18,5
09023000	Black tea (fermented or partly fermented) in	JAPAN	500	99 956	2,6
09023000	Black tea (fermented or partly fermented) in	miscellaneous	290	49 473	1,3
09023000	Total		21 520	3 773 492	100
09024000	Black tea (fermented or partly fermented) in	REUNION	9 513	1 257 692	89,6
09024000	Black tea (fermented or partly fermented) in	FRANCE	873	140 568	10
09024000	Black tea (fermented or partly fermented) in	GERMANY,FEDERAL REPUBLIC OF	18	4 740	0,3
09024000	Total		10 404	1 403 000	100
17011100	Raw cane sugar, in solid form, not flavoure	UNITED KINGDOM	489 827 985	6 620 558 353	81,4
17011100	Raw cane sugar, in solid form, not flavoure	PORTUGAL	59 350 000	733 892 000	9
17011100	Raw cane sugar, in solid form, not flavoure	UNITED STATES	19 601 564	274 550 985	3,4
17011100	Raw cane sugar, in solid form, not flavoure	FRANCE	5 685 133	101 291 600	1,2
17011100	Raw cane sugar, in solid form, not flavoure	GERMANY,FEDERAL REPUBLIC OF	4 912 084	88 821 876	1,1
17011100	Raw cane sugar, in solid form, not flavoure	BELGIUM	4 889 893	86 175 434	1,1
17011100	Raw cane sugar, in solid form, not flavoure	NETHERLANDS	2 591 393	45 826 904	0,6
17011100	Raw cane sugar, in solid form, not flavoure	ITALY	2 316 450	41 736 663	0,5
17011100	Raw cane sugar, in solid form, not flavoure	SPAIN	2 010 840	34 163 994	0,4
17011100	Raw cane sugar, in solid form, not flavoure	miscellaneous	8 236 880	111 228 735	1,4
17011100	Total		599 422 222	8 138 246 544	100
16041400	Prepared or preserved tuna, skipjack and ai	UNITED KINGDOM	22 847 349	1 574 697 113	87,7
16041400	Prepared or preserved tuna, skipjack and ai	GERMANY,FEDERAL REPUBLIC OF	977 291	52 297 251	2,9
16041400	Prepared or preserved tuna, skipjack and ai	NETHERLANDS	745 862	42 891 692	2,4
16041400	Prepared or preserved tuna, skipjack and ai	FINLAND	651 420	37 033 944	2,1
16041400	Prepared or preserved tuna, skipjack and ai	SWEDEN	547 850	33 190 695	1,8
16041400	Prepared or preserved tuna, skipjack and ai	miscellaneous	1 032 387	55 423 075	3,1
16041400	Total		26 802 159	1 795 533 770	100

