

## **IV. INTERNATIONAL TRADE IN AGRICULTURAL PRODUCTS**

### **A. INTERNATIONAL TRADE IN AGRICULTURE**

Latin America and the Caribbean is the only region of the developing world with a significant trade surplus in the agricultural sector. This has two direct consequences. Firstly, progress in agriculture plays a major strategic role in the overall development process; secondly, the region is more sensitive to changes in international markets and more vulnerable to interventions that restrict or distort competition in international trade.

During the last decade, and particularly since 1993, Latin American and Caribbean agricultural exports (defined broadly to encompass crop, livestock, fishery and forestry products) gained renewed momentum, thanks to a recovery in the international prices of several of the region's main export products in 1994-1996. During the second half of the decade, external sales were further boosted by subregional integration agreements, particularly MERCOSUR. In recent years, the region's agricultural exports have totalled about US\$ 60 billion per year (US\$ 62.3 billion in 2001, the latest year for which there is information from all subsectors). In comparison, between 1980 and 1993, the total value of agricultural exports was around US\$ 35 billion.

On the other side of the trade account, the region's agricultural imports grew rapidly between 1987 and 1997, boosted mainly by increased foreign purchases in Mexico. Although Mexican imports continued to grow after 1997, the expansion was offset by a reduction in Brazil, as imports were substituted by domestic supply, and the regional total tended to level off between US\$ 30 billion and US\$ 32 billion, in other words just over half the level of exports.

The region's agricultural imports grew faster than exports between 1988 and 1993, since when the rate of growth of both trade flows has been similar following the more vigorous export growth of 1993. Consequently, having shrunk from US\$ 24 billion to US\$ 17 billion between 1988 and 1993, the surplus was restored thereafter and has since tended to stabilize between US\$ 28 billion and US\$ 30 billion (see figures 208 and 209).

Figure 208

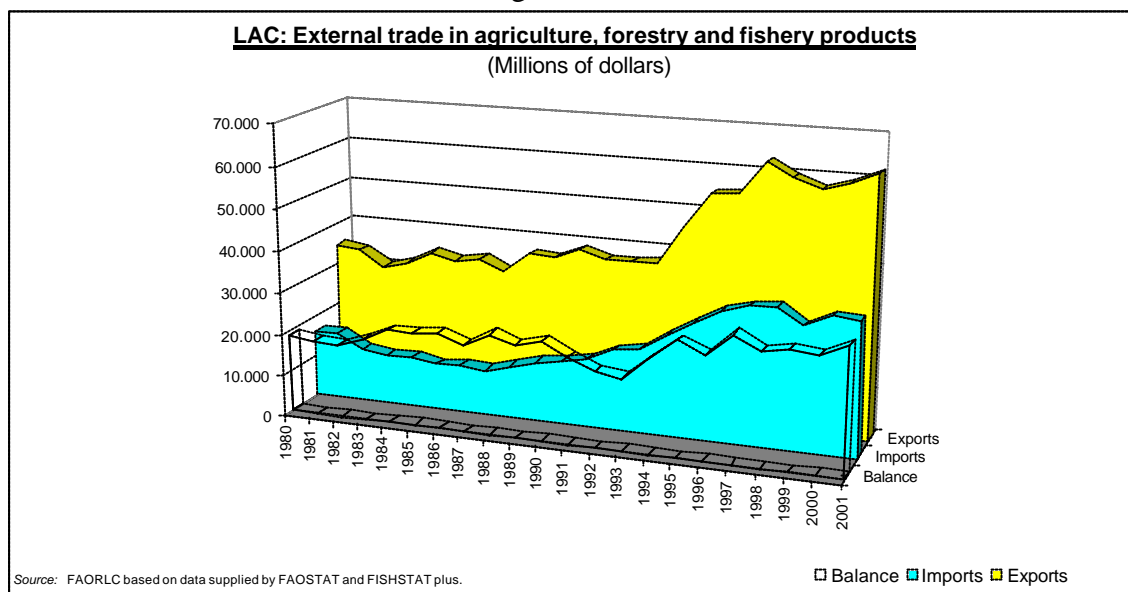
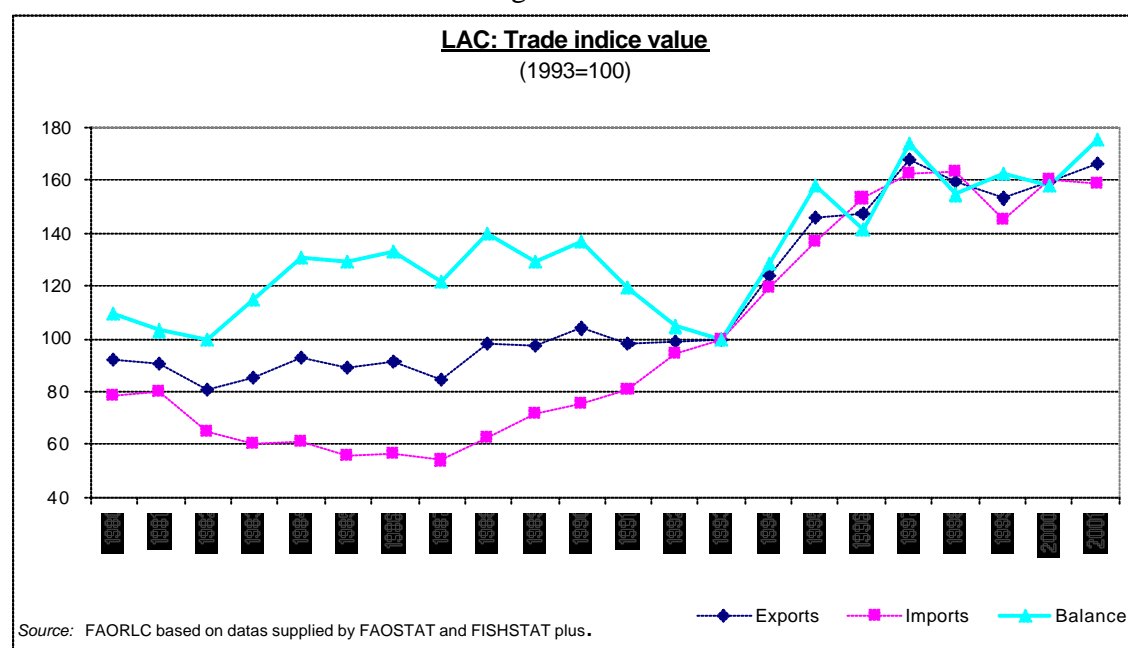


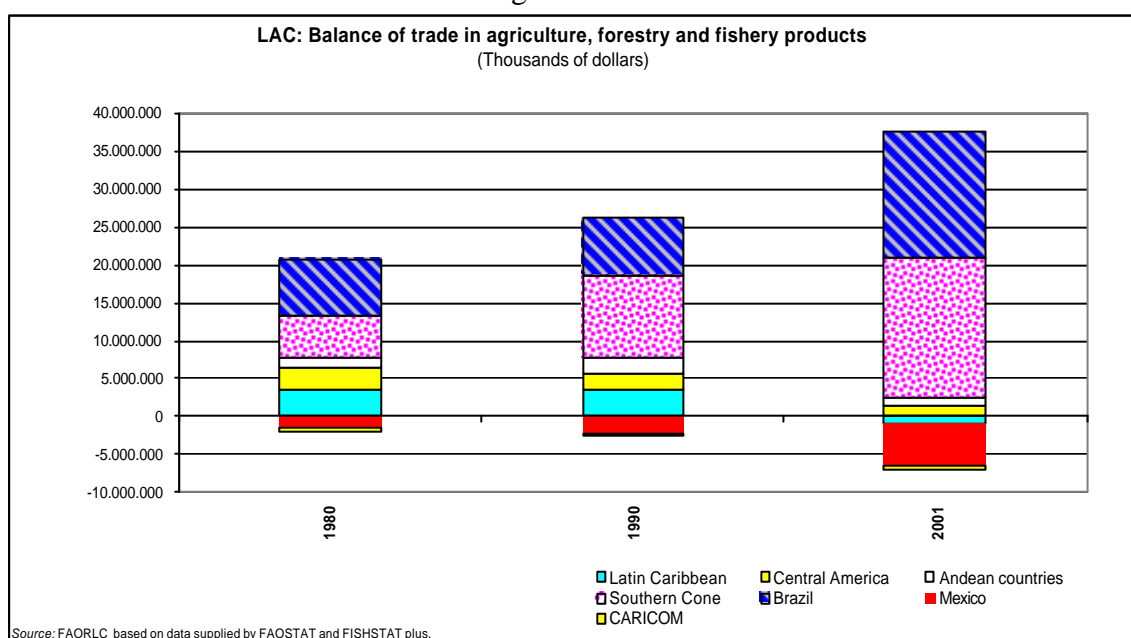
Figure 209



The size of the sectoral trade surplus (between US\$ 28 billion and US\$ 30 billion) has been very significant in the overall context of the region's external accounts. The regional current account deficit fluctuated between US\$ 38 billion and US\$ 88 billion per year between 1993 and 2001, so the contribution made by an agricultural sector surplus of around US\$ 30 billion is significant for the wider external balance.

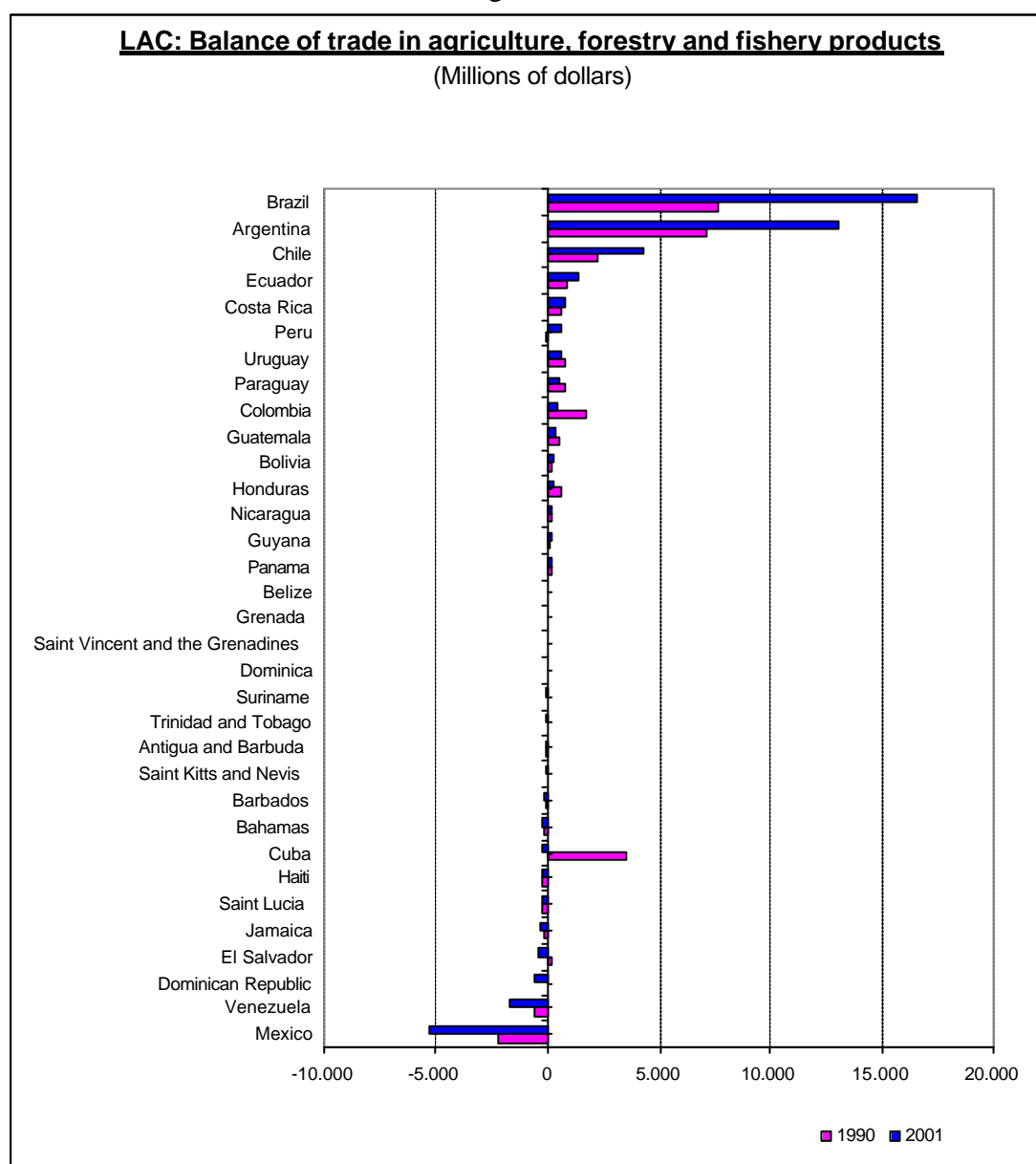
The agricultural trade surplus is generated essentially in Brazil and the southern cone countries, which account for most of the regional figure, with rapidly increasing shares. In contrast, the agricultural trade deficit in Mexico is also expanding fast and accounts for most of the region's deficit. Mexico and the CARICOM countries, except for Belize and Guyana, are traditionally net importers of agricultural products. Over the last decade the Latin Caribbean countries have also posted deficits resulting from a deterioration in Cuba's agricultural trade balance, and vigorous import growth in the Dominican Republic (see figure 210).

Figure 210



Most of the region's countries have a surplus in their agricultural trade; only Mexico, Venezuela, El Salvador and some of the Caribbean island states run systematic deficits. The sectoral balance is significant in a large number of Latin American and Caribbean countries, although the regional balance – positive or negative – is concentrated in just a few countries, reflecting the wide differences in the size of the region's economies. Brazil, Argentina and Chile display the largest surpluses, while Mexico and, to a lesser extent, Venezuela have the largest deficits (see figure 211).

Figure 211



Source: FAORLC on the basis of data supplied by FAOSTAT and FISHSTAT plus.

About 80% of the agriculture-forestry-fishery trade surplus is generated by the crop-producing subsector, and in recent years fisheries have contributed most of the rest. The net balance of trade in livestock and forestry products is virtually zero, although in recent years has tended to be slightly negative (see figures 212 and 213).

Figure 212

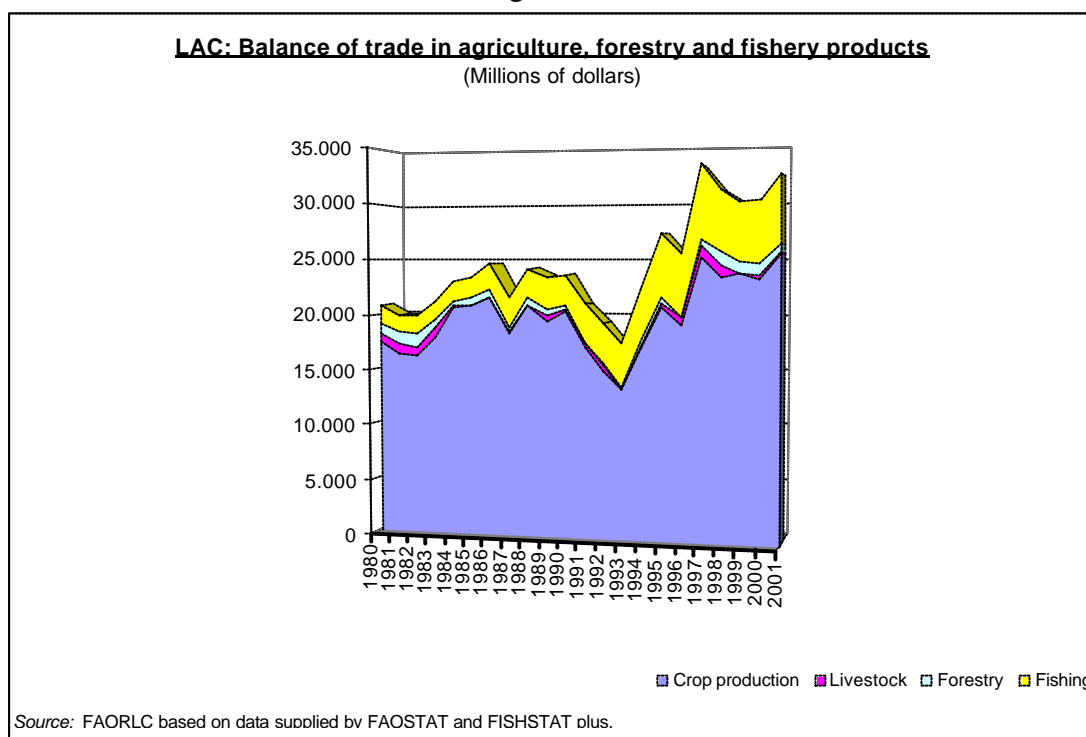
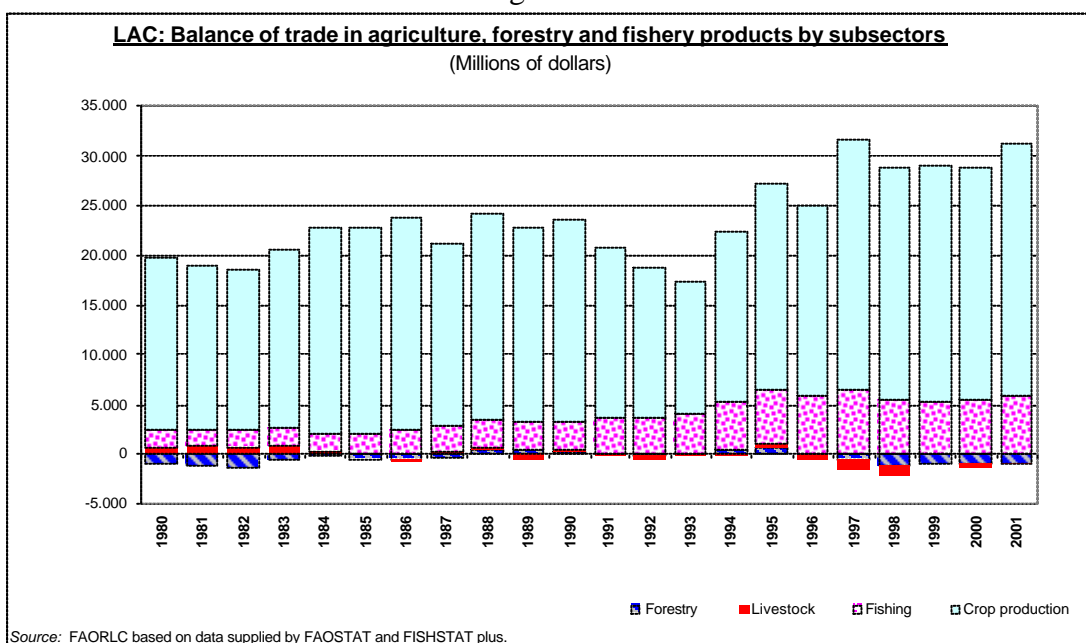


Figure 213



(i) *Exports*

The rapid growth of sectoral exports during the last decade has been quite widespread throughout the region. In Brazil, Mexico and the southern cone countries, export values doubled during the decade, although in Mexico the increases are small in absolute terms. Exports from the Andean countries also grew in smaller proportion. Central American exports expanded slowly, while those from CARICOM countries

stagnated, and exports from the Latin Caribbean plummeted as a result of a drastic slump in Cuba. This trend contrasts with the general stagnation endured during the 1980s, when only the southern cone countries managed to increase their agricultural exports. The cumulative change has resulted in a greater concentration of the region's exports in Brazil and the southern cone, each of which account for one third of the total (see figures 214 and 215).

Figure 214

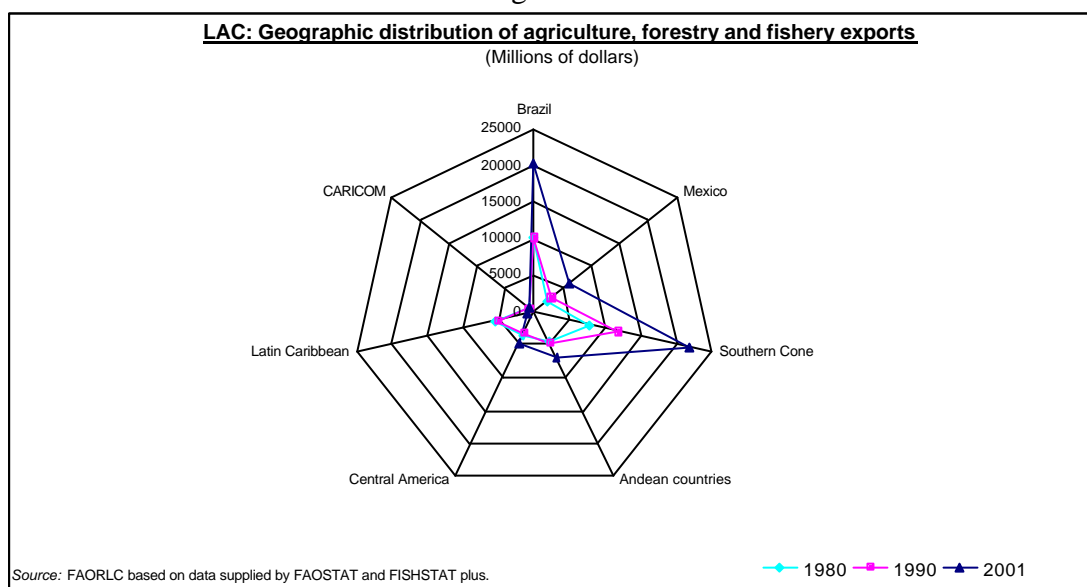
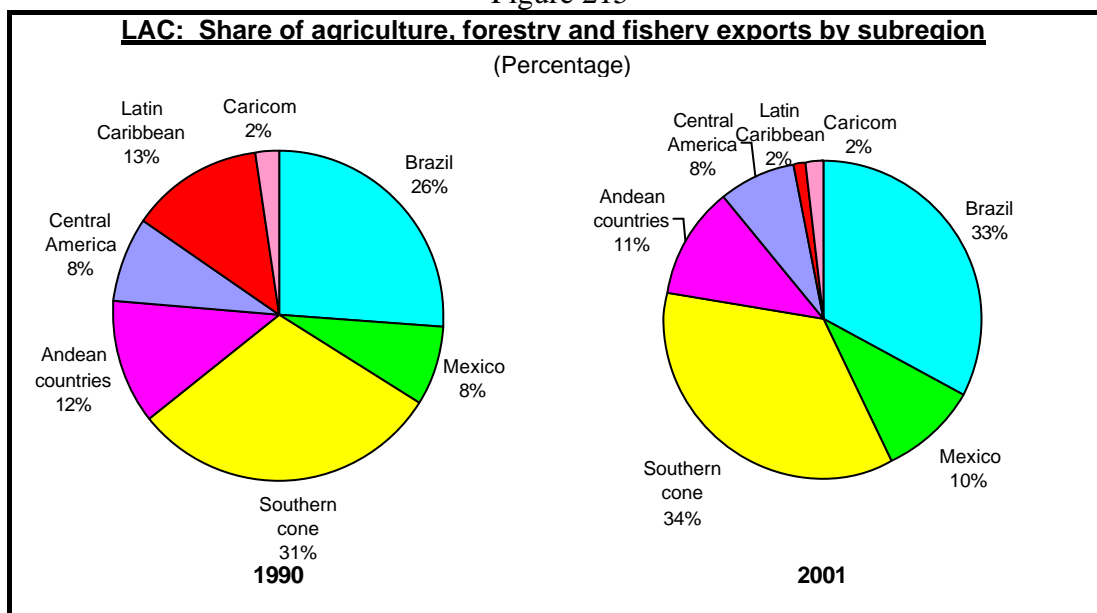


Figure 215

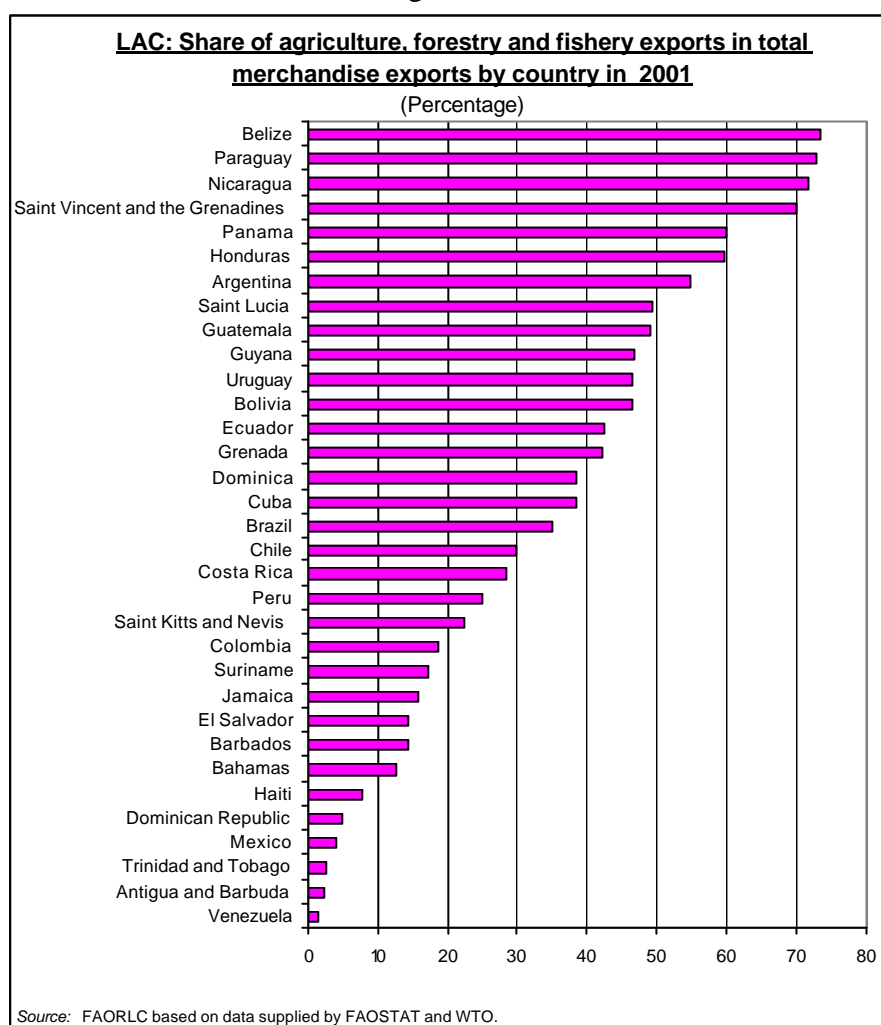


In the long run, the agricultural share in total merchandise exports is tending to decline, as external trade diversifies and products from manufacturing industry gain a larger share. In 1980, agricultural exports from Latin America and the Caribbean accounted for one third (33%) of total merchandise exports; but by 1990 the figure

had fallen to 27%, and by 2001 it had reached 17%. In this latter period the reduction mainly reflected rapid growth in non-agricultural exports from Mexico.

The share of agriculture in total merchandise exports is very substantial in many countries of the region. In 2001 the sector contributed over 30% of total merchandise sales abroad in 18 cases; and in seven of those countries it accounted for over half. The sector accounted for under 10% of total goods exported in just six countries (see figure 216).

Figure 216



The majority of sectoral exports are generated by the crop-growing subsector; nonetheless, sales of fishery and to a lesser extent forestry products, are growing faster and thus gaining a larger relative share. In 1990, just over three quarters (76%) of the sector's exports came from the crop-production; whereas the remaining 24% was divided roughly equally among the other three subsectors, livestock (9%), fishing (8%) and forestry (7%). The relatively faster growth of fishery and forestry exports during the decade resulted in a larger share for these subsectors. In 2001, crop-production continues to be the largest contributor (72%), while livestock exports held their level (9%) and fishery and forestry exports increased their shares (11% and 8%, respectively) (see figures 217 and 218).

Figure 217

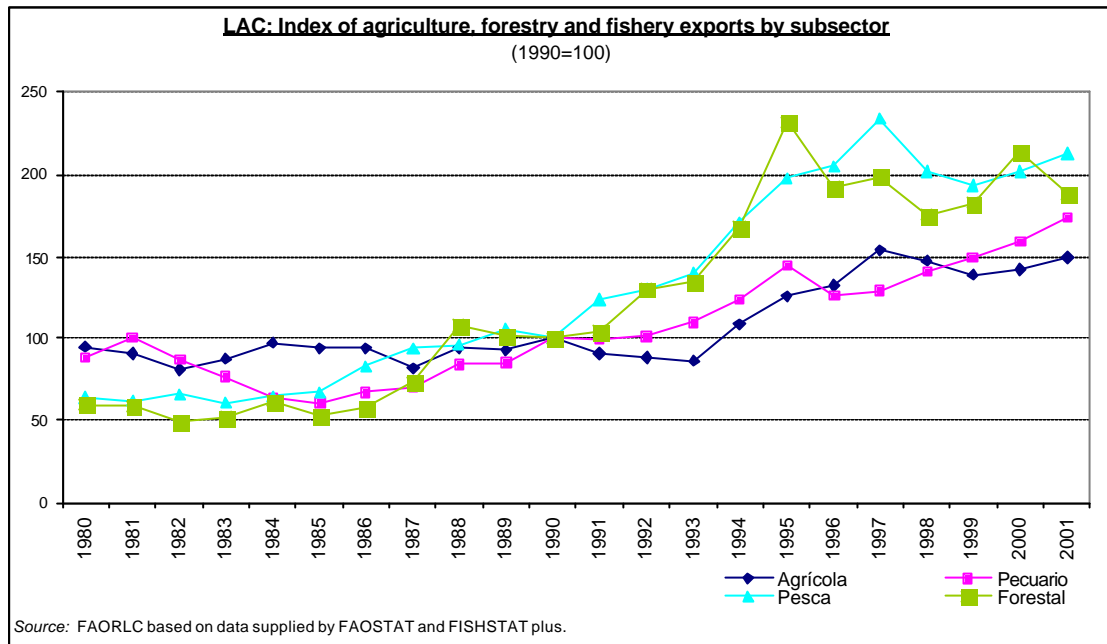
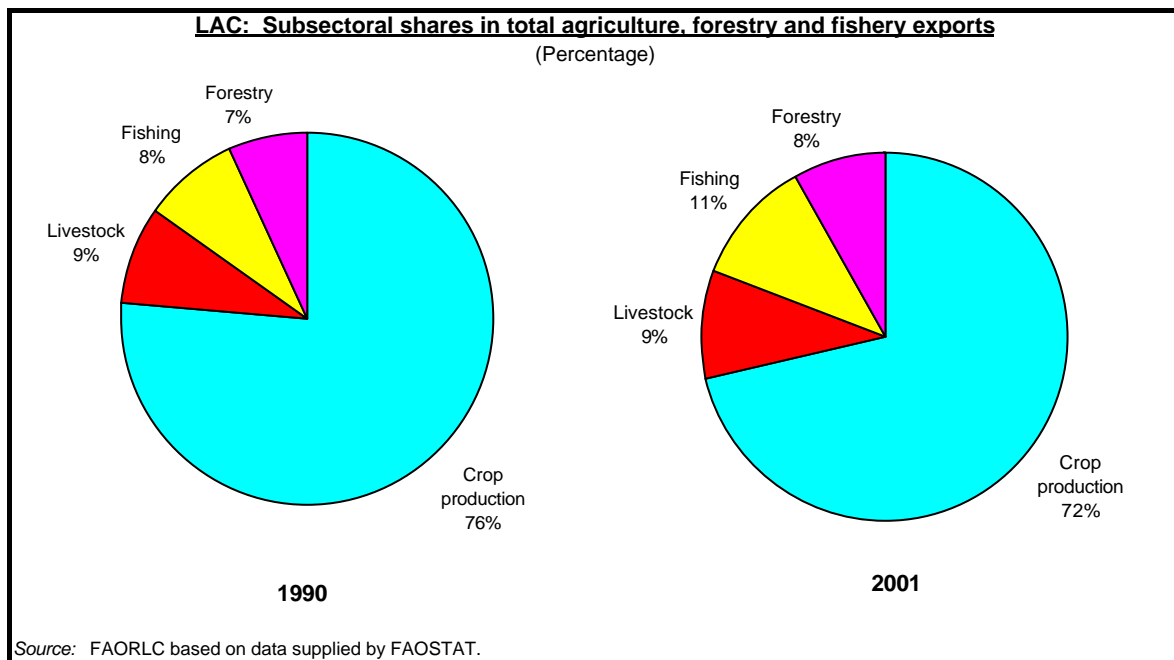


Figure 218





(ii) Imports

Until 1987, the region's agricultural imports were relatively stable around US\$ 12 billion per year; but rapid growth of foreign purchases by Mexico as from 1988, together with an import surge in Brazil midway through the 1990s, raised the regional total to US\$ 33 billion in 1998. Thereafter the level stabilized slightly below its peak, essentially reflecting a reduction in imports to Brazil in the wake of a rapid expansion of domestic supply in that country.

The most important change in the 1980s was Mexico's increased share of the region's total agricultural imports, which rose from 22% to 34%. During the 1990s, particularly in the later years, Brazil's share declined from 17% to just 12% of the regional total. The imports of Latin Caribbean countries also shrank as result of a slump in international trade in Cuba. In contrast, imports in the southern cone grew, partly as a result of intra-regional trade between MERCOSUR countries; while imports also expanded in Central America and Mexico (see figures 219 and 220).

Figure 219

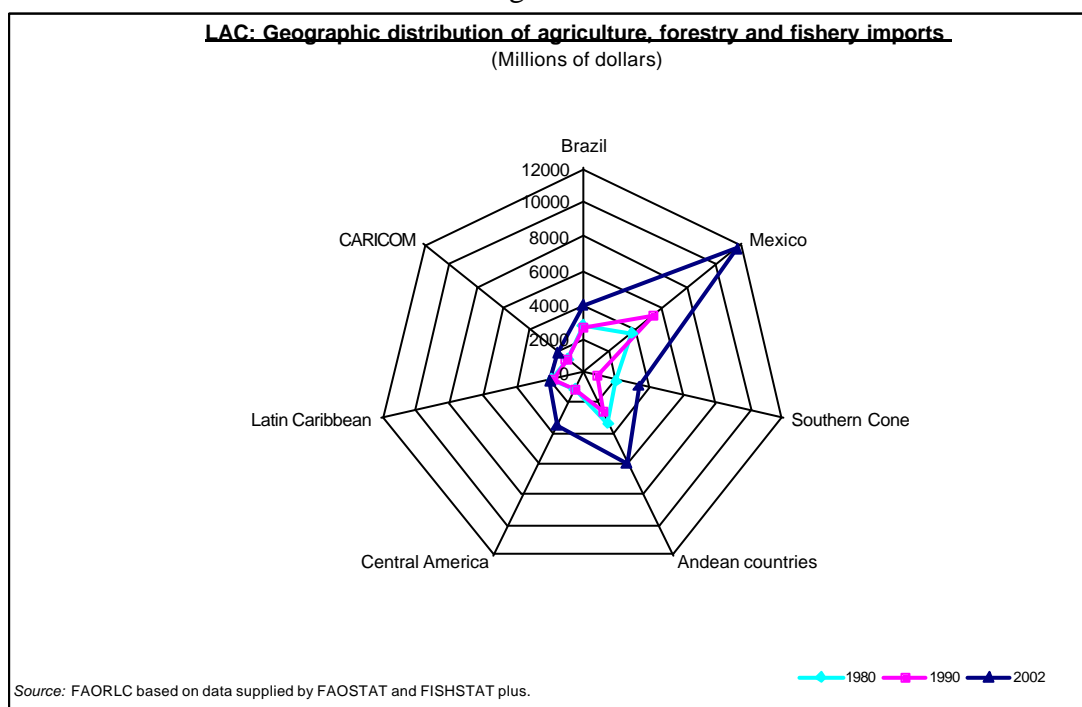
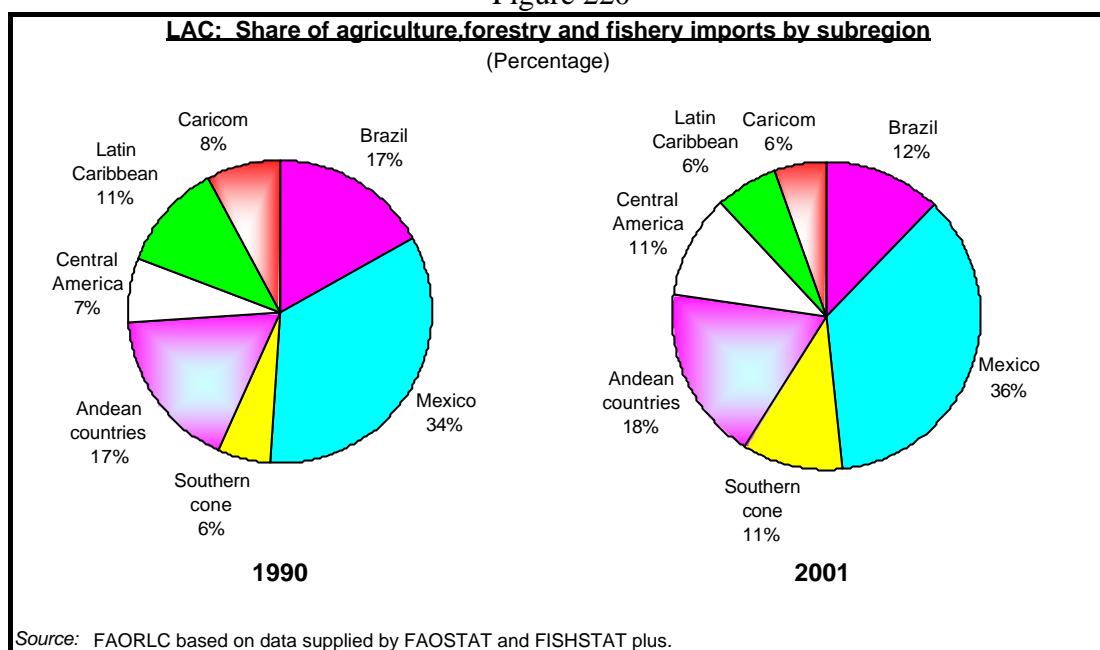


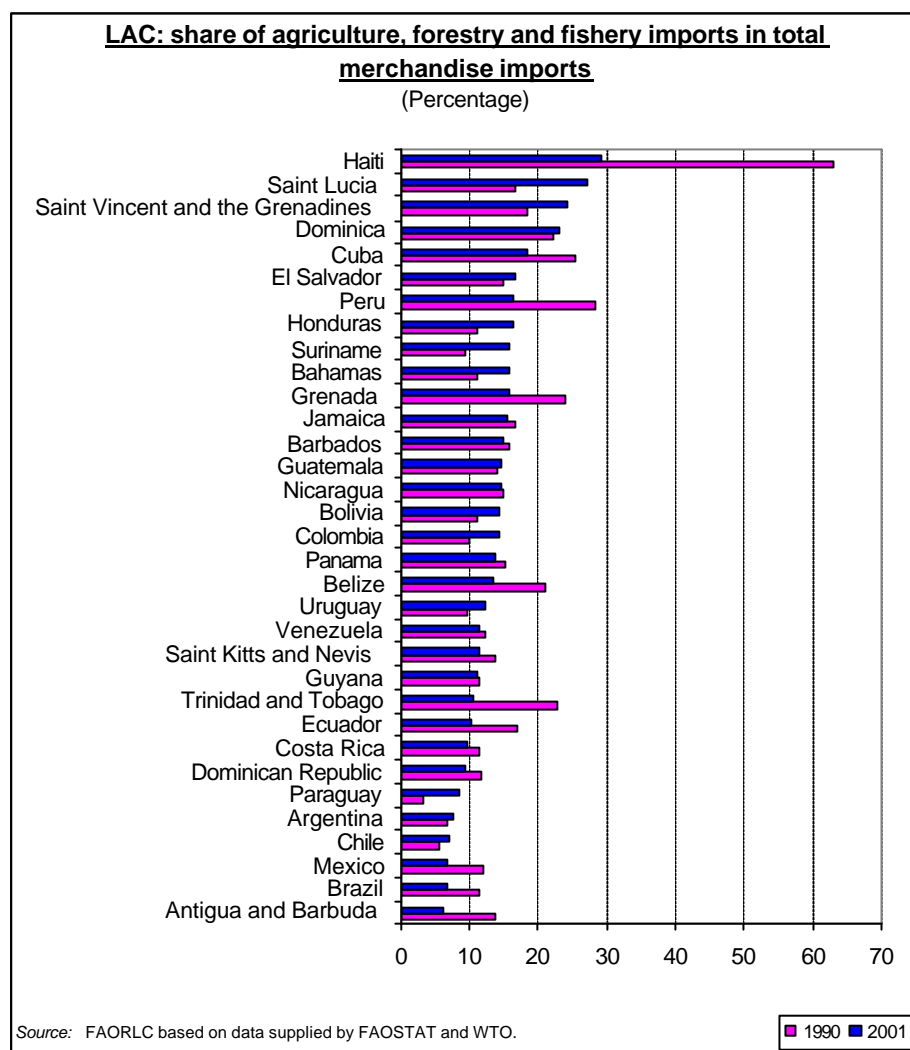
Figure 220



The regional capacity to generate agricultural surpluses is further confirmed by the small share of agriculture in total merchandise imports. This is consistent with the region's development level and the need to use foreign purchasing power for high-technology and more capital-intensive products. During the 1980s, agricultural products accounted for about 14% of total merchandise imports; from 1990 through 1997, the proportion fell to about 12%, and in the ensuing years it has continued to decline, accounting for just 9% of total goods imported by the region in 2001.

The small share of agricultural products in total goods imports is a general characteristic of the region. In 29 of the region's 33 countries, the share of agricultural products in total merchandise imports was below 18% in 2001; the share was larger only in four Caribbean countries – Haiti (29%), Saint Lucia (27%), Saint Vincent and the Grenadines (24%) and Dominica (23%) (see figure 221).

Figure 221



The composition of sectoral imports has tended to remain stable. About 60% corresponds to crops, 19% to livestock products; 18% to forestry and 3% to fishery products. Within this overall stability, forestry and fishery imports are growing slightly faster, albeit from a smaller absolute base. In contrast, livestock imports are growing more slowly (see figures 222 and 223).

Figure 222

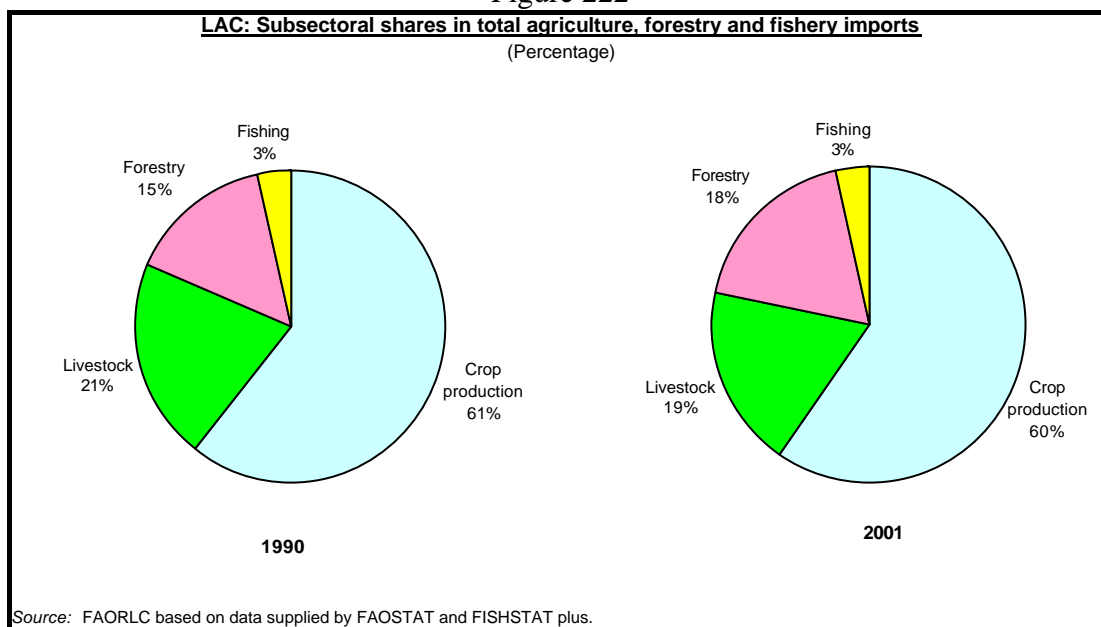
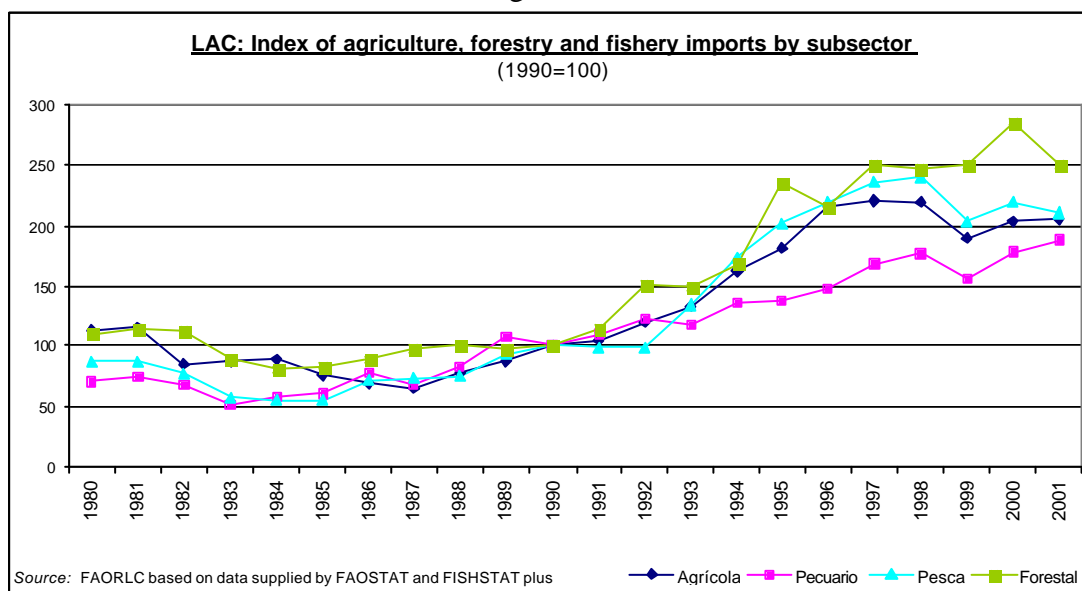


Figure 223



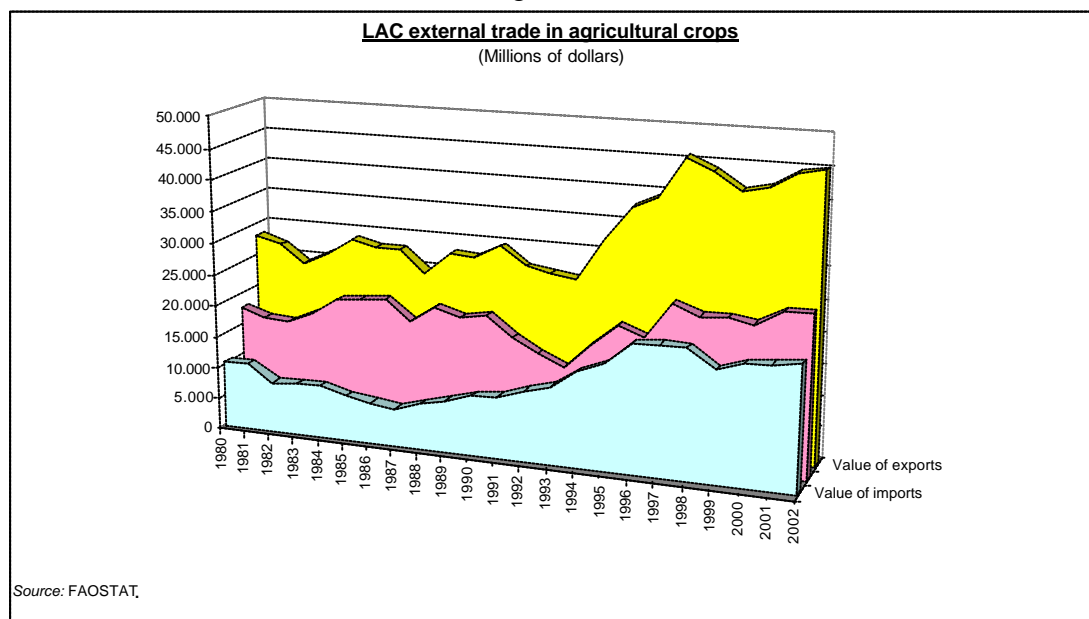
## B. CROP-PRODUCING SUBSECTOR

### (i) Subsectoral balance

Exports of agricultural crops accounted for 72% of the region's total sectoral exports in 2002, and 12.9% of its total merchandise exports. Crop imports represented 61% of total agricultural imports and about 5.1% of all merchandise imports.

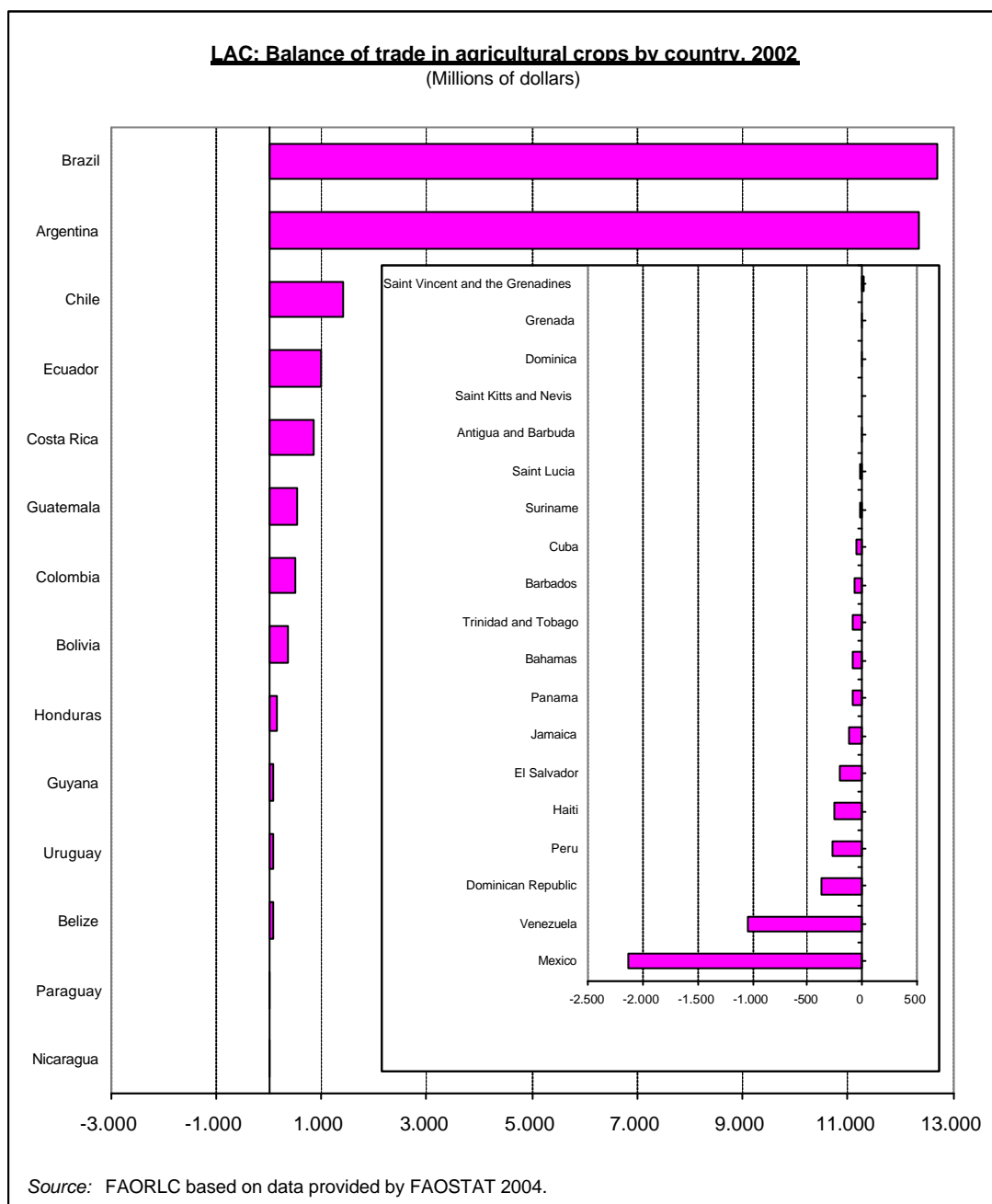
From 1984 to 1990 the subsectoral surplus had stabilized around US\$ 20 billion. In the early years of the 1990s, as a result of a steady slide in export prices and stagnation in export volumes compounded by continuous import growth, the surplus shrank to just US\$ 13 billion by 1993. Since that year export values have recovered, thanks firstly to higher international prices, and secondly to larger volumes shipped in response to the price stimulus. By 1997, the surplus had almost doubled to reach US\$ 25 billion. Prices subsequently resumed their downward trend, and the surplus stabilized around US\$ 25 billion (see figure 224).

Figure 224



The agricultural crop surplus varies widely between the different countries of the region, and is concentrated in Brazil and Argentina, given the size of these economies. Nonetheless, Chile, Ecuador, Costa Rica, Guatemala, Colombia and Bolivia also display significant surpluses. Despite the surplus at the regional level, a large number of countries run deficits in their crop trade. In 2002, these included Mexico, Venezuela, Peru, Panama, El Salvador and virtually all island states (see figure 225).

Figure 225

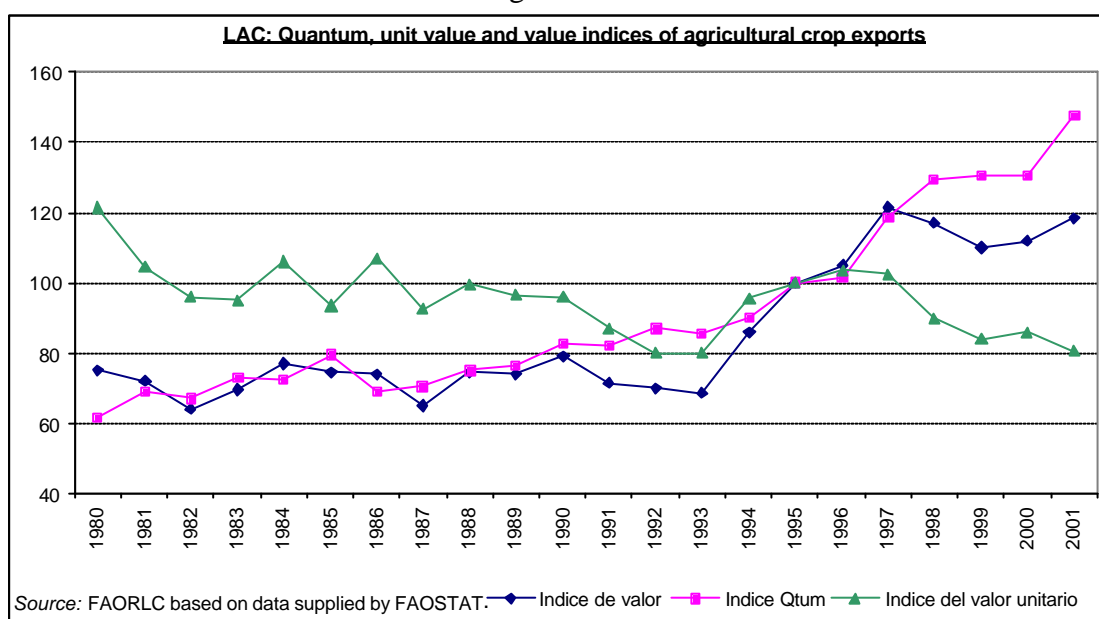


(ii) *Exports*

Between 1980 and 1993, crop exports hardly grew at all (the rate of expansion was 0.01%) and remained stuck at levels around US\$ 26 billion. In contrast, between 1993 and 2002, foreign sales expanded at a rate of 4.9% per year. Better prices and larger volumes shipped raised total export value to US\$ 46 billion by 1997. Although volumes have continued to grow since then, weaker prices have undermined values, and total crop exports have stabilized around US\$ 45 billion.

The behaviour of international prices plays a key role in explaining the acceleration of export growth. Firstly, there is a direct effect on the monetary value of goods exported; secondly, better prices may also stimulate an increase in export volumes. The international prices of the region's agricultural exports had been falling systematically during the 1980s, registering a cumulative decline of 34% between 1980 and 1993. In 1994, by contrast, prices rose by 19%, and in the two following years there were additional increases (5% and 3%), after which these levels were maintained until 1997. Since then prices have fallen back again and are 31% below their 1996 peak (see figure 226).

Figure 226

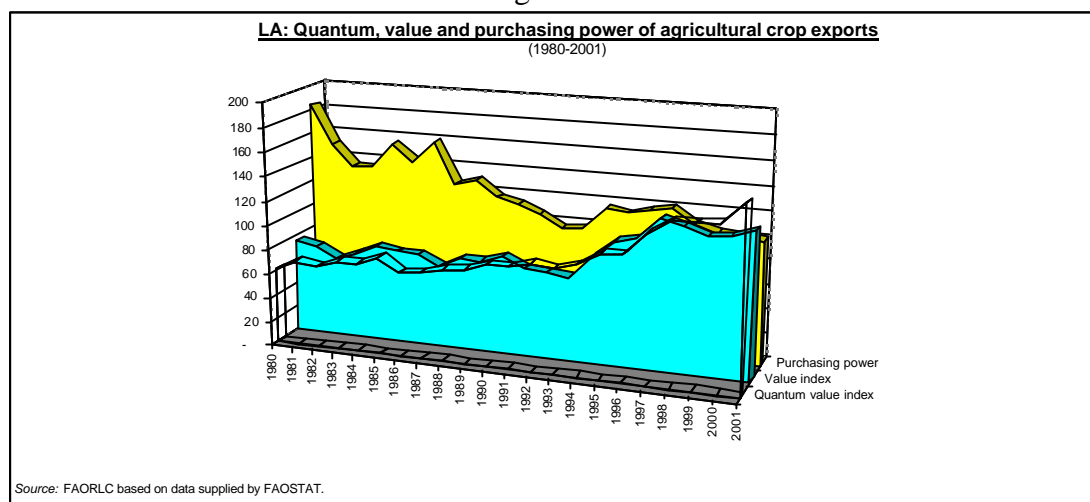


***Between 1980 and 1993, export volumes had expanded slowly, posting a cumulative increase of 37% during those 13 years. In 1994 volumes began to grow rapidly on the back of better prices; and in the seven years to 2001<sup>37</sup> they increased by 73%.***

From 1980 to 1993, a deterioration in the agricultural terms of trade, measured as the price ratio between the region's agricultural exports and its total imports, meant a sharp decline in external purchasing power. During that period, despite physical export volumes growing by 37%, a steady fall in prices meant that export earnings in 1993 were actually 10% less than in 1980. This reduction, compounded by higher prices for goods imported in the region, meant that the external purchasing power of exports in 1993 was barely half of its 1980 level (54%), despite having sold larger volumes abroad (see figure 227).

<sup>37</sup> The latest year for which quantum data is available.

Figure 227



Between 1993 and 2001, rising prices in the early years were followed by a fall from 1997 onwards, thereby giving a virtually neutral result for the period overall. Thus, the 73% increase in the volume of agricultural products exported between 1997 and 2001 represented a 76% increase in value terms. Nonetheless, the rise in import prices caused external purchasing power to decline by 11% during the period.

#### *Composition of exports*

The composition of agricultural exports from Latin America and the Caribbean has altered significantly in recent decades. In 1980, the key export products were coffee and sugar. The slump in sales of these products resulting from drastic changes on international markets, in conjunction with the growth of oilseed and fruit exports during the 1980s, meant that in 1990 the region's exports were more diversified, with the four product groups mentioned at broadly similar levels. Over the last decade, these trends have intensified, especially the growth of oilseed exports. External fruit sales also grew strongly, as to a lesser extent did vegetable sales. Cereal exports increased, thanks partly to the development of intra-regional cereal trade especially within MERCOSUR. Sugar exports continued to slide, and coffee exports also dropped. In 2002, the main export products were oilseeds (28%), followed by fruit (19%) (see figures 228 and 229).



Figure 228

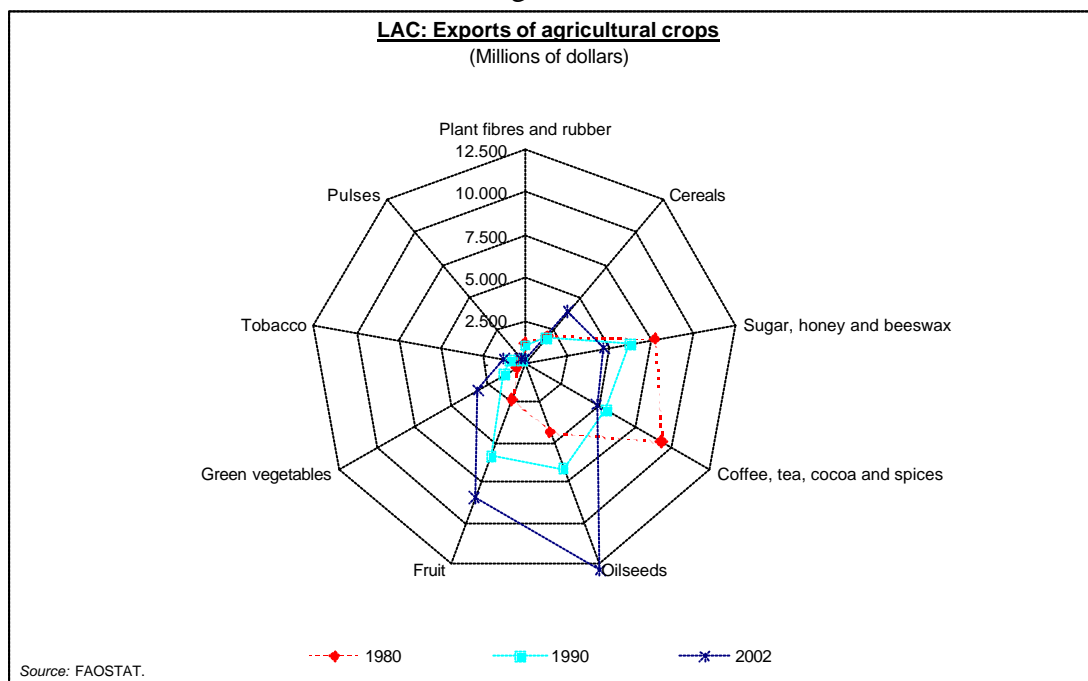
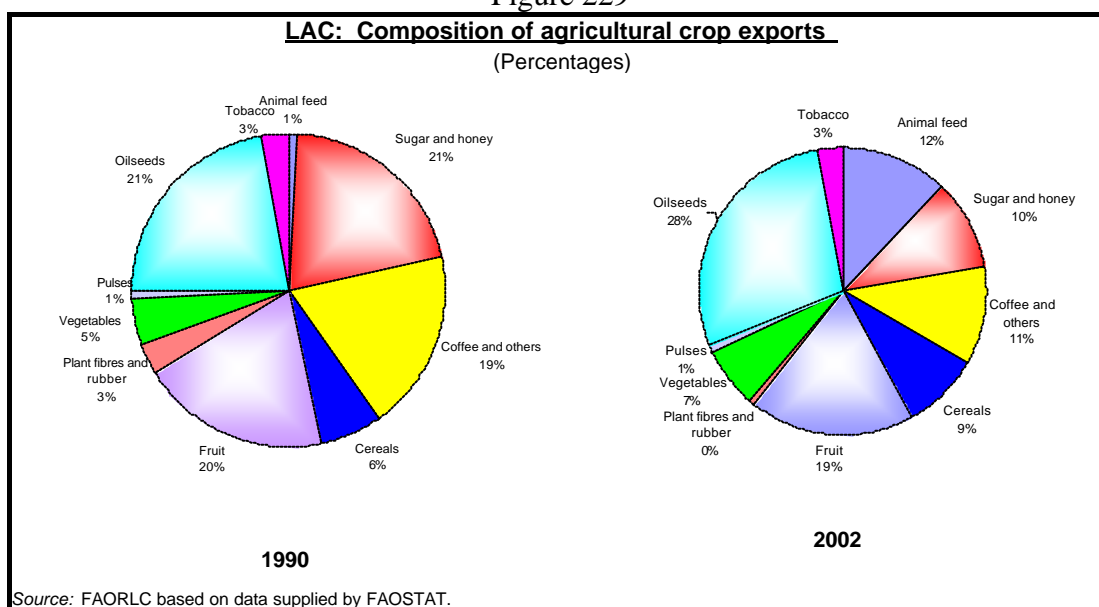


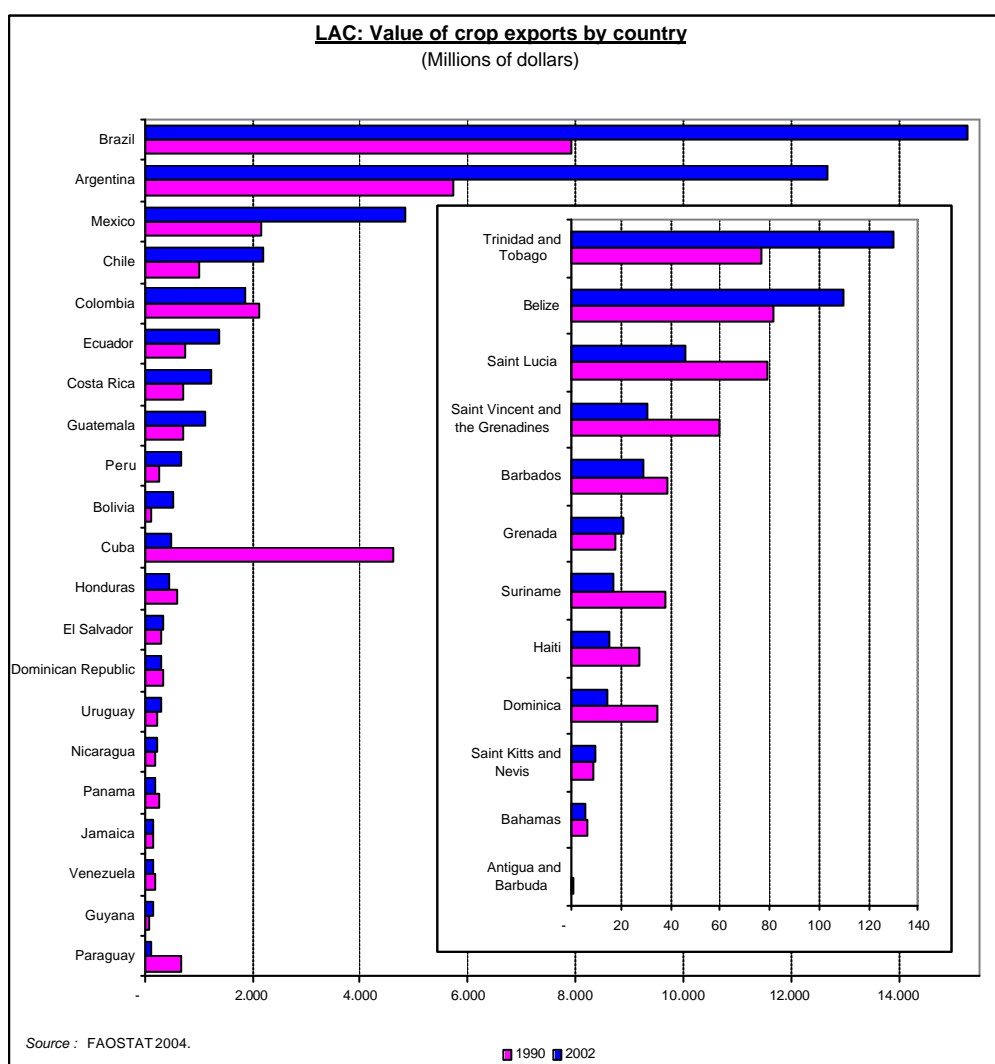
Figure 229



### *Geographic distribution of crop exports*

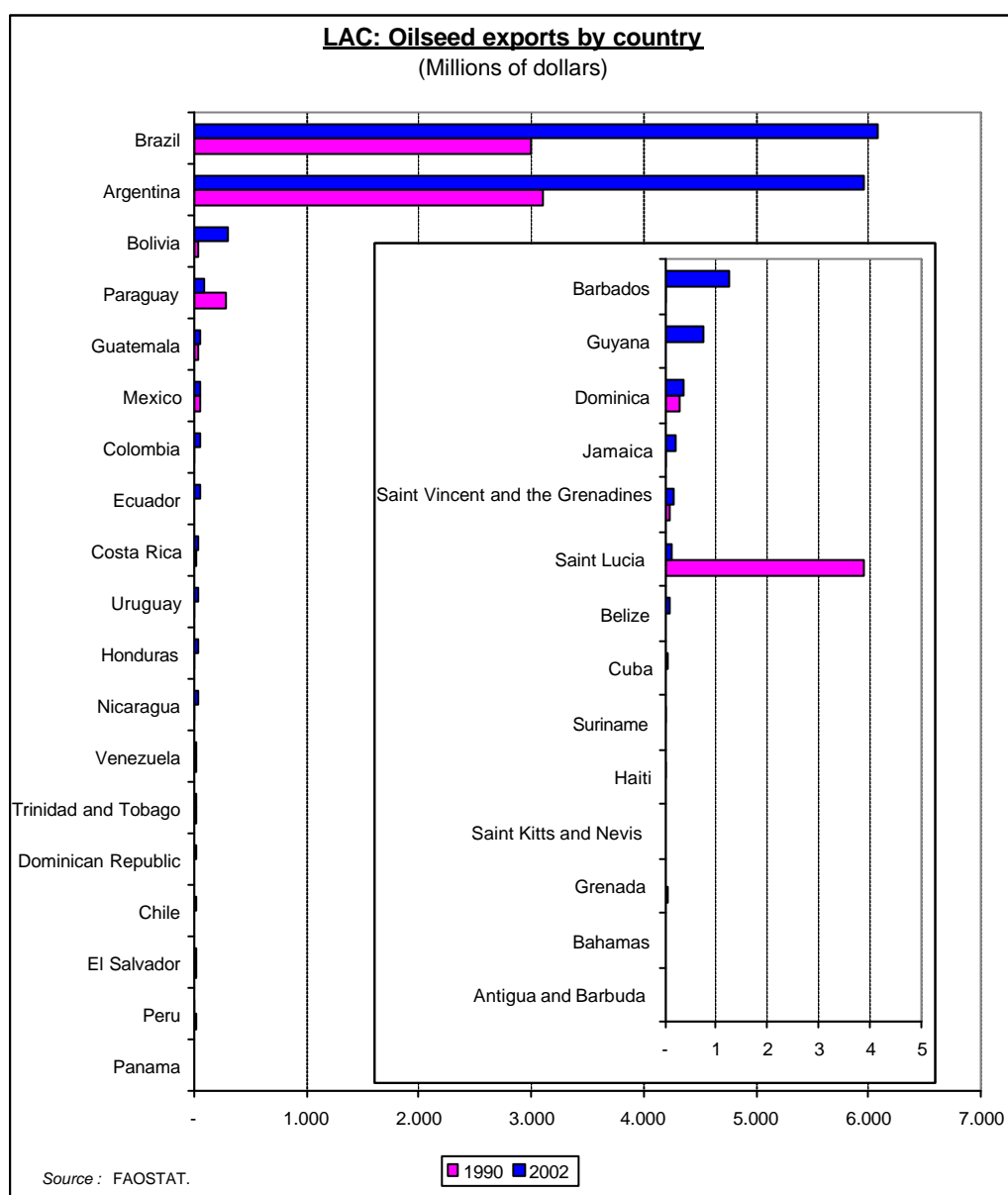
In absolute terms the region's crop exports are highly concentrated in the largest economies. Nonetheless, the last decade has witnessed additional concentration in Brazil and Argentina that cannot be explained by size difference alone, but reflects the share of these two countries in the recent expansion of soybean exports. In addition to the larger absolute level, both countries display extremely high export growth, of 6.2% and 8.2% per year, respectively. Exports from Mexico also grew strongly (8.1% per year), reflecting that country's coordination with the North American market. Other countries that saw their share of exports increase include Chile (5.7%), Costa Rica (5.8%), Guatemala (5.8%), Peru (8.8%), Bolivia (14.4%), Bahamas (8.3%) Trinidad and Tobago (5.0%) and Belize (4.9%) (see figure 230).

Figure 230



In 1990, exports of oilseeds from Latin America and the Caribbean were highly concentrated in Argentina and Brazil, while other countries exported relatively marginal amounts. By 2002, this concentration had intensified sharply, especially as result of soybean exports in these two countries. On a smaller scale, but with major importance for the country's agriculture, soybean exports have also expanded in Bolivia (see figure 231).

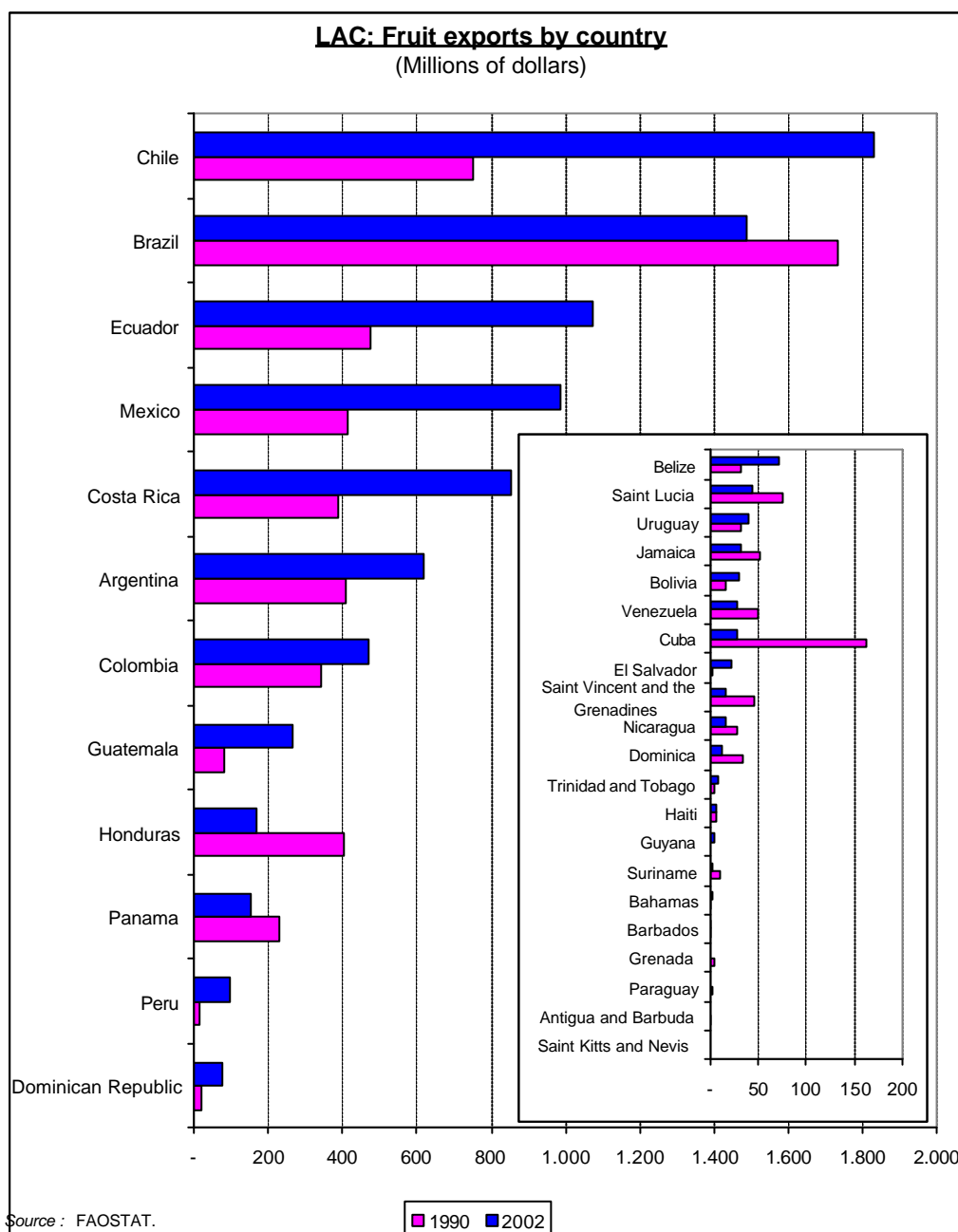
Figure 231



The geographic location of fruit exports is widely distributed throughout the region. Until the 1990s the leading exporter was Brazil, partly thanks to its sales of citric products; but the remarkable development of fruit growing in Chile over the last two decades has resulted in a rapid expansion of fruit exports from this country, virtually tripling during the decade, while exports from Brazil were hampered by difficulties in

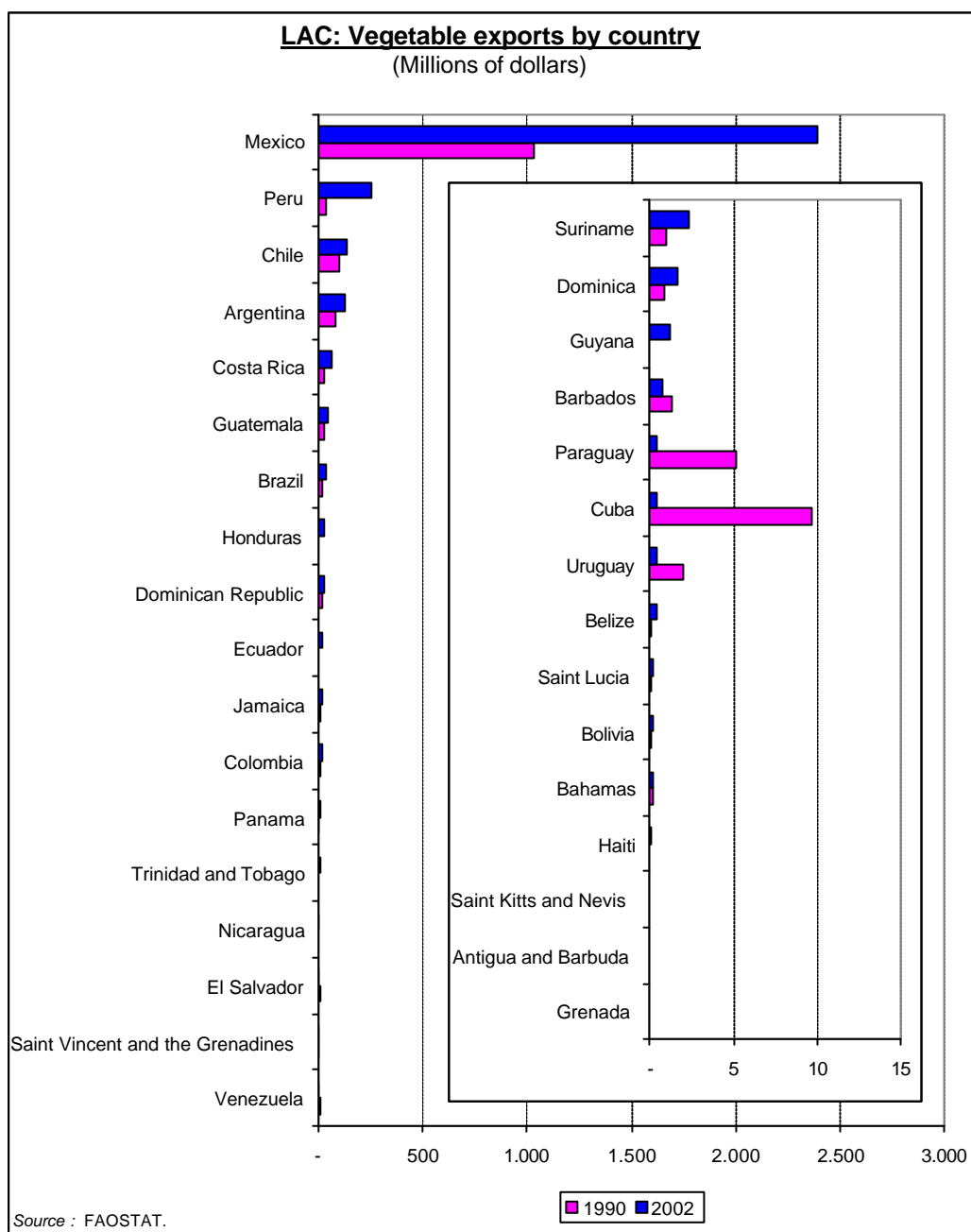
the markets for orange juice and other citric products. In addition to Brazil and Chile, fruit exports are important in most countries of the region (see figure 232).

Figure 232



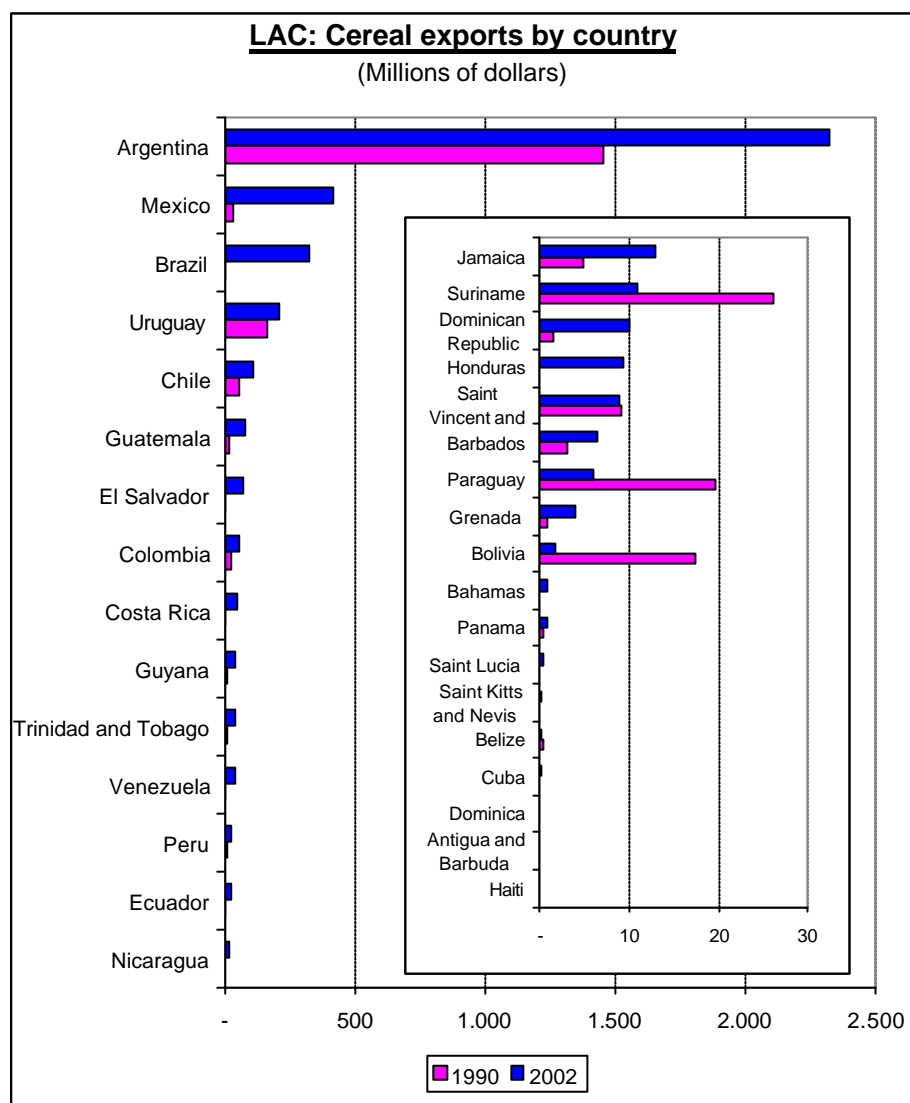
In 1990, the region's vegetable exports were heavily concentrated in Mexico, reflecting sales to the United States that took advantage of geographic proximity and climate differences. Implementation of the North American Free Trade Agreement (NAFTA) meant that by 2002 concentration had intensified still further. There has also been significant growth in Peru, thanks largely to exports of asparagus and preserves. Vegetable exports are also important in Central America, Argentina and Chile, as well as in other countries of the region (see figure 233).

Figure 233



Cereal exports are highly concentrated in Argentina, partly reflecting trade within MERCOSUR (see figure 234).

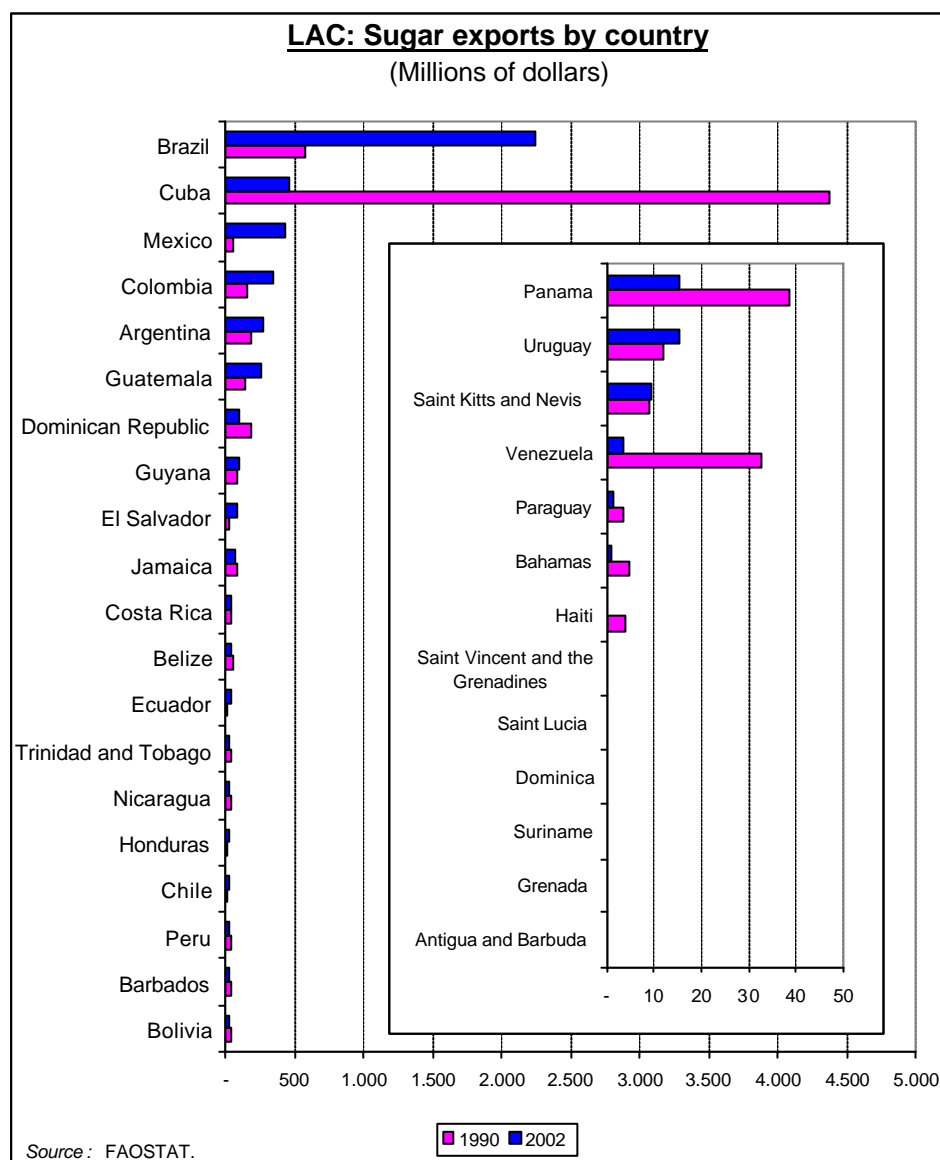
Figure 234



Source: FAOSTAT:

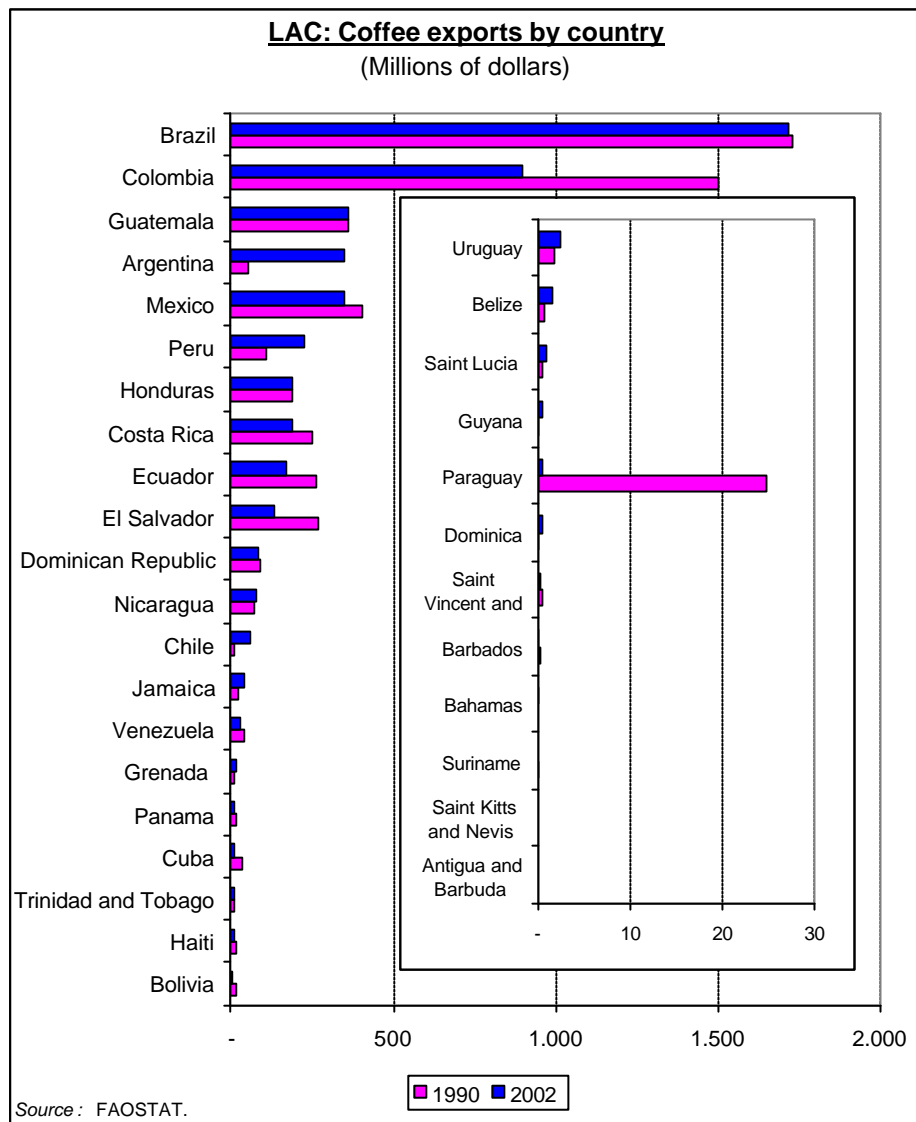
Following the slump in Cuban sugar exports, caused by the disappearance of the market provided by the socialist countries, sugar exports now mainly come from Brazil, followed by Mexico. Export growth has been restricted since this is a highly intervened market, and because of the effect of sugar substitutes on demand, and low-productivity conditions in most countries of the region (see figure 235).

Figure 235



The time series analysed does not record the collapse of Latin American and Caribbean coffee exports over the last few years, resulting from changes on the international market following increased levels of production in Vietnam and elsewhere. This change further accentuates the tremendous instability displayed by this market, which has a very major effect in several of the region's economies, especially those in Central America. Traditionally the leading producers have been Brazil and Colombia, followed by Mexico and the Central American countries (see figure 236).

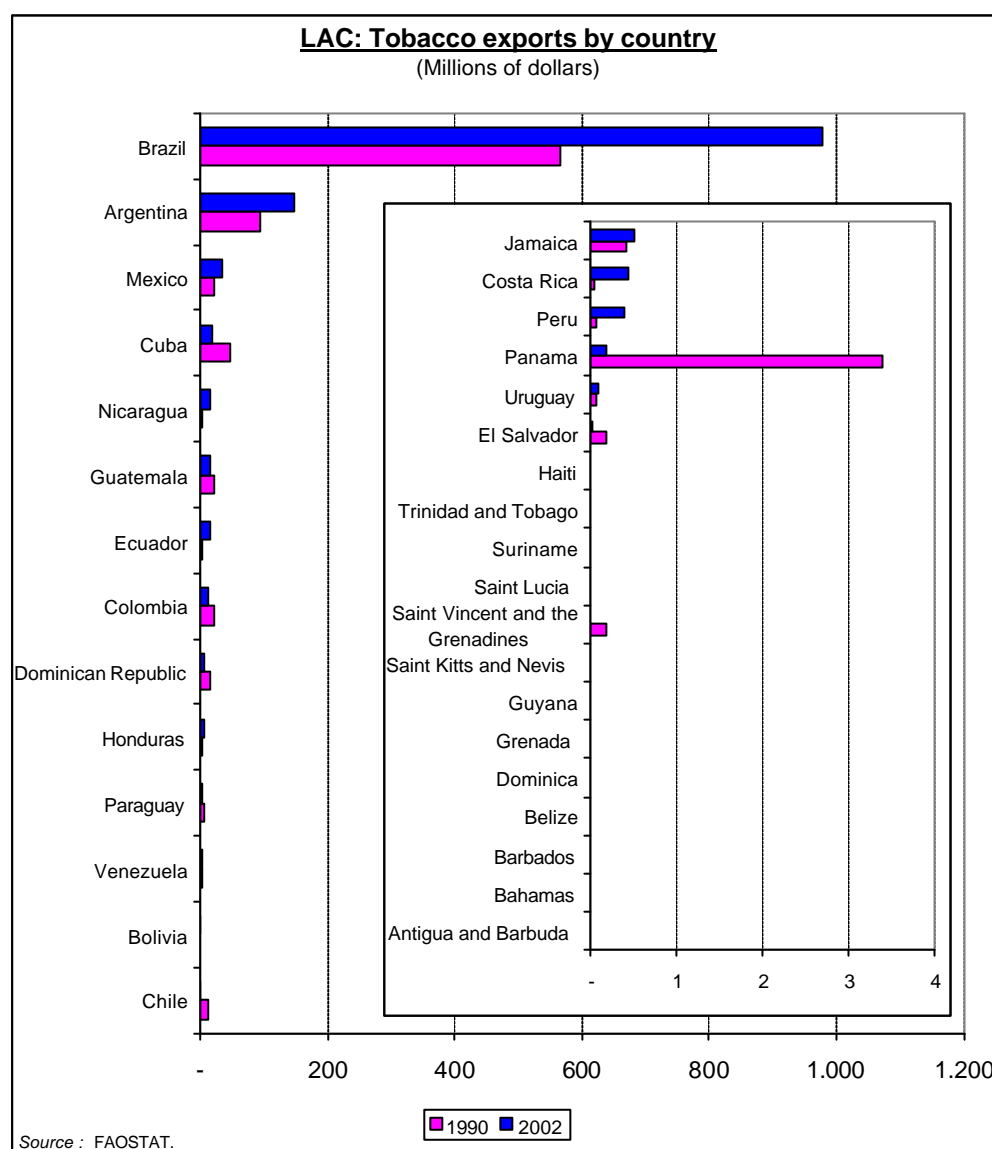
Figure 236





Tobacco exports have been highly concentrated in Brazil, and that trend intensified strongly during the last decade (see figure 237).

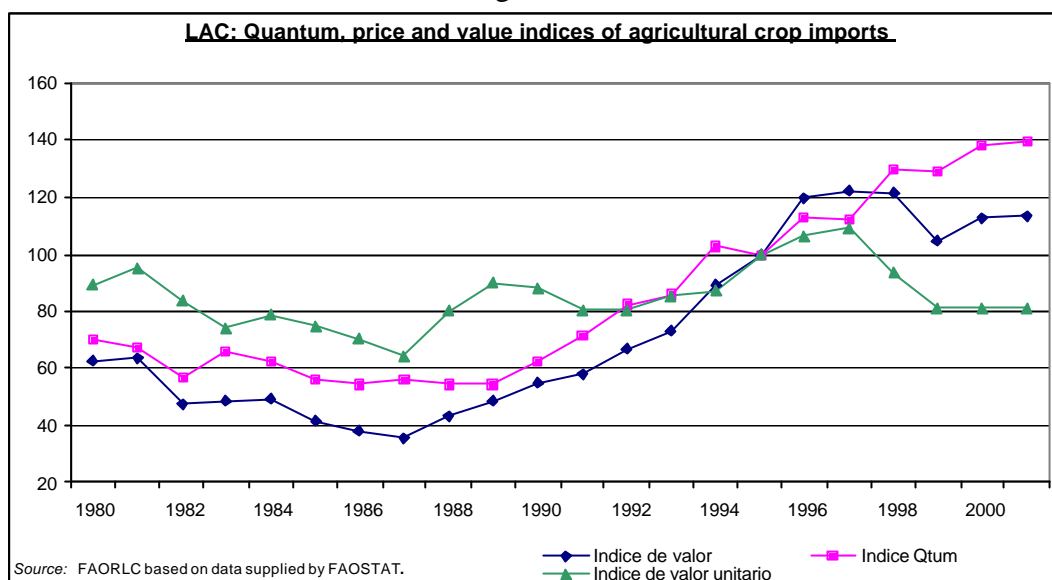
Figure 237



## (ii) Imports

Having been in decline during the 1980s, the region's crop imports resumed their growth in the 1990s, thanks to relative recovery in the economies concerned, and boosted by greater market integration and larger trade flows between the MERCOSUR countries. During the 1980s, regional imports declined by 2.6% per year; but, in the 1990s they grew at an average annual rate of 6.5%. The total amount imported (roughly US\$ 8 billion in the 1980s) reached US\$ 20 billion in 1996, and stabilized around that level until 2002. Of this growth, 80% resulted from larger import volumes, while 20% reflected price increases (see figure 238).

Figure 238



### *Composition of agricultural crop imports*

In the 1980s cereals and oilseeds were already the largest categories in the region's crop imports, and during the last decade they also grew most in absolute terms. Imports of fruit, vegetables and animal feed have also expanded (see figures 239 and 240).

Figure 239

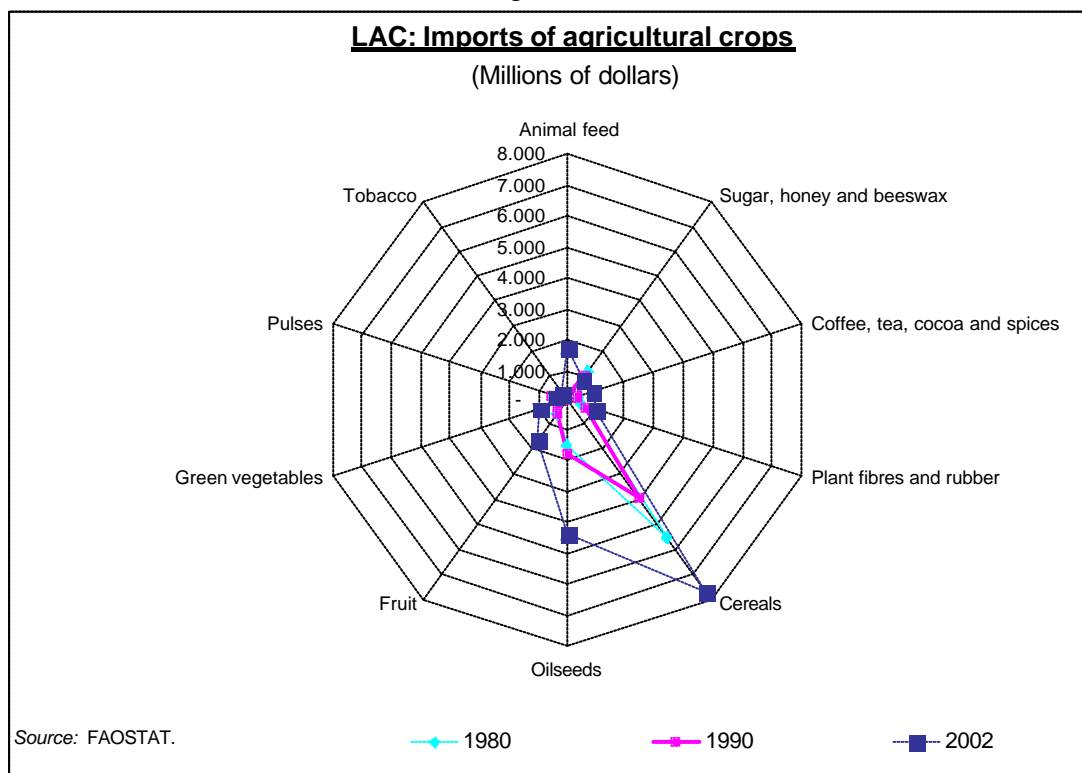
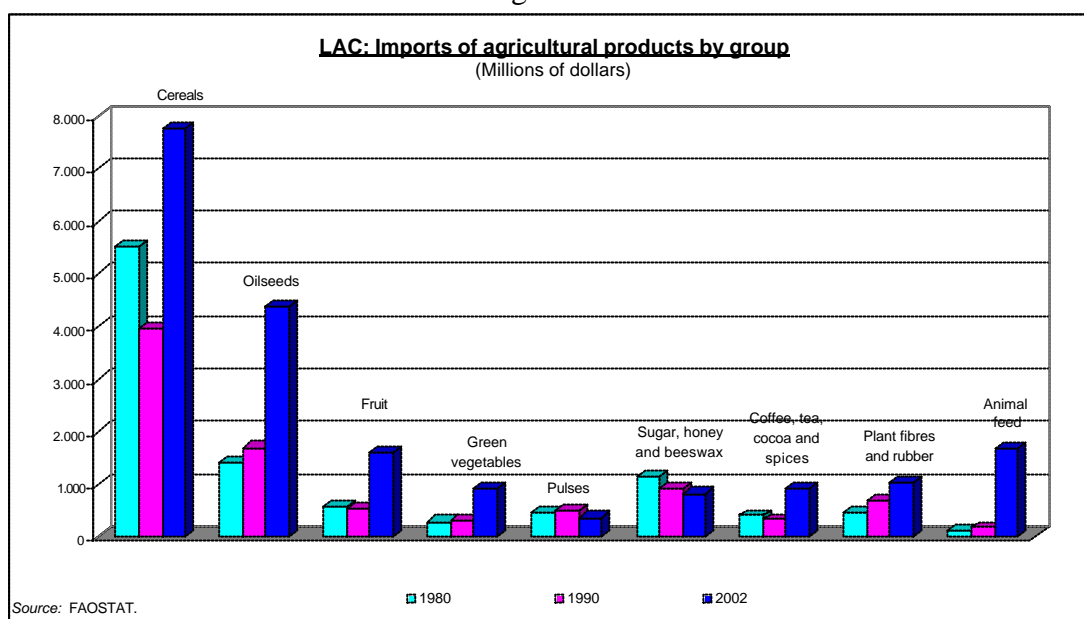


Figure 240



### *Geographic distribution of crop imports*

Mexico is easily the region's leading importer of agricultural crops, accounting for one third of the total. This large share reflects a longstanding situation that intensified as from 1988 when Mexican imports began to accelerate. The shares of the various subregions have changed little over the last decade, although the Central American share has risen from 7% to 12%, and Brazil's has shrunk from 17% to 13% (see figure 241).

Figure 241

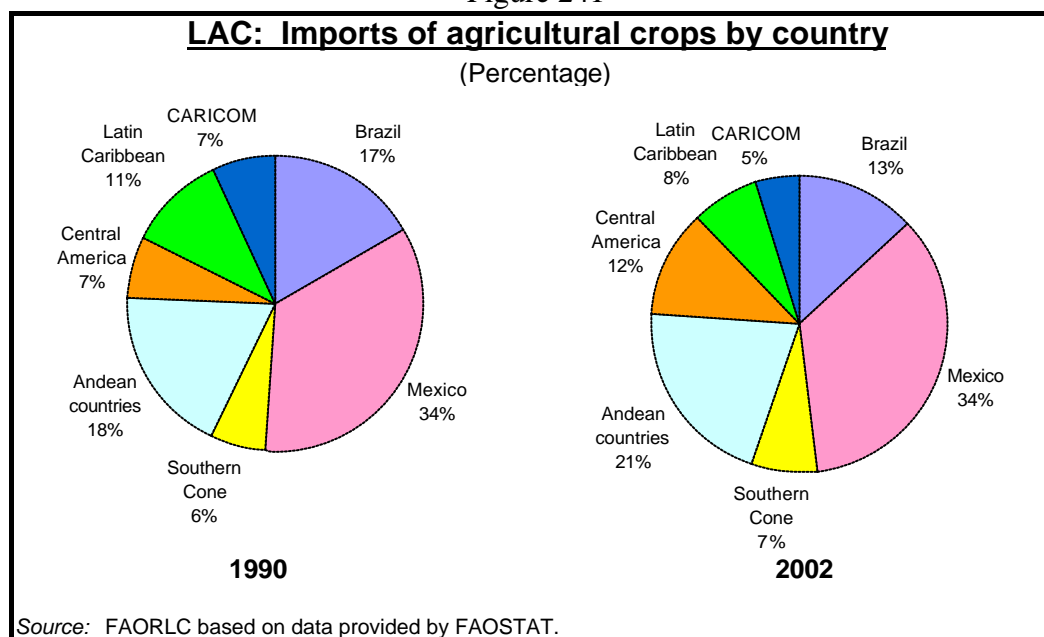
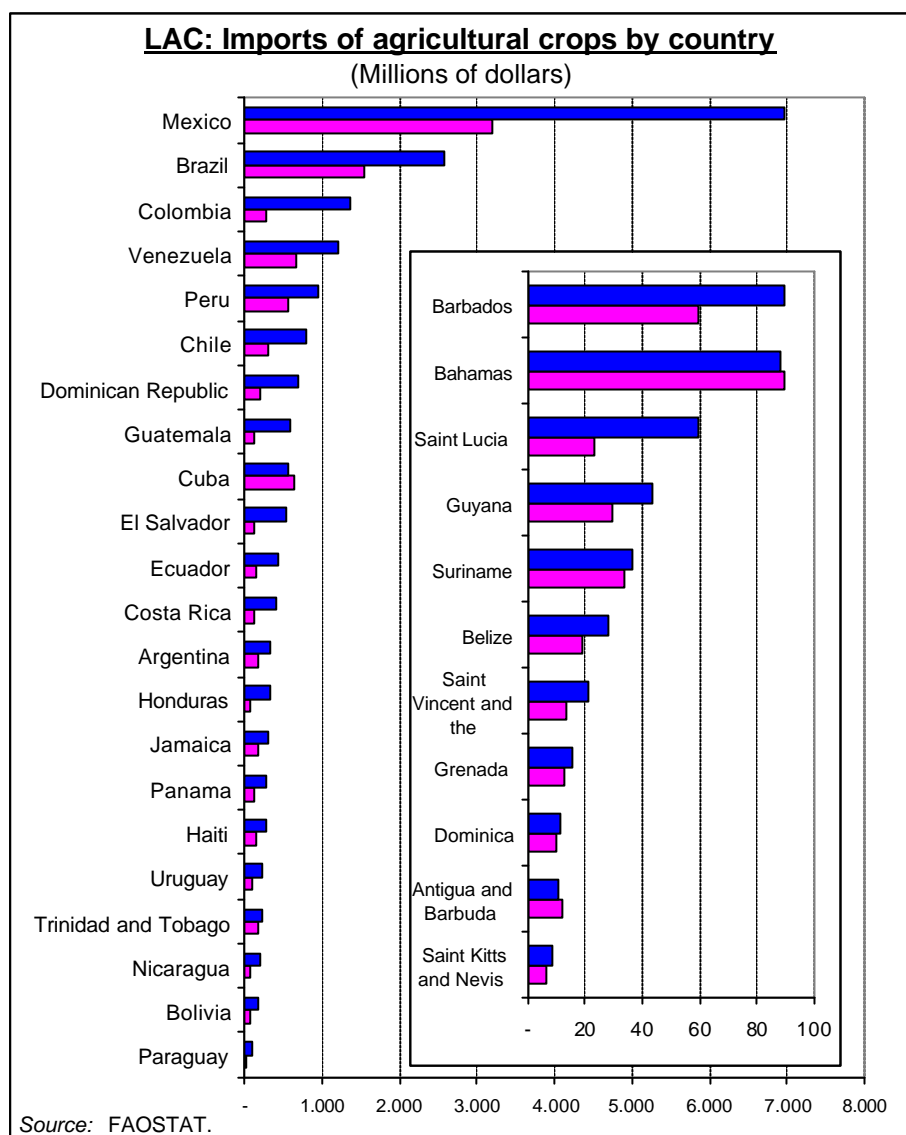
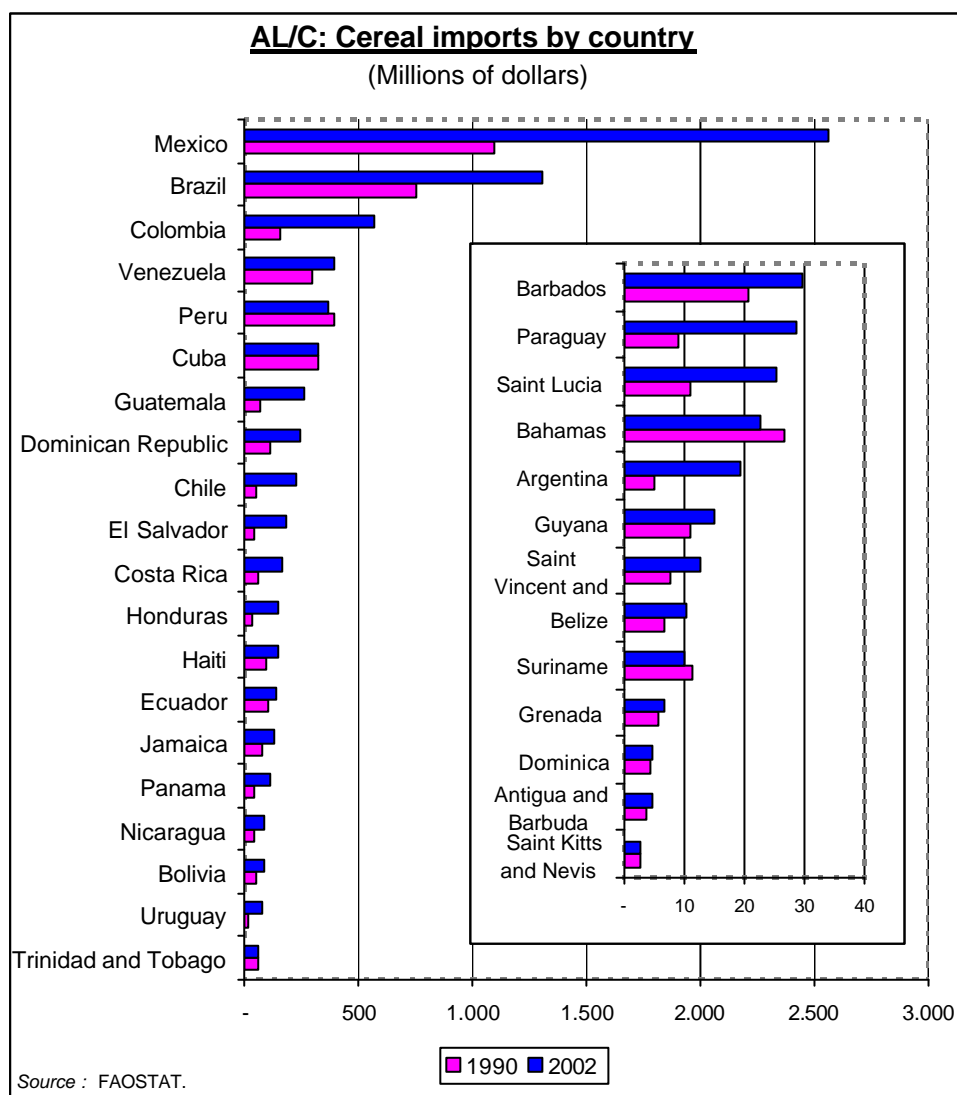


Figure 242



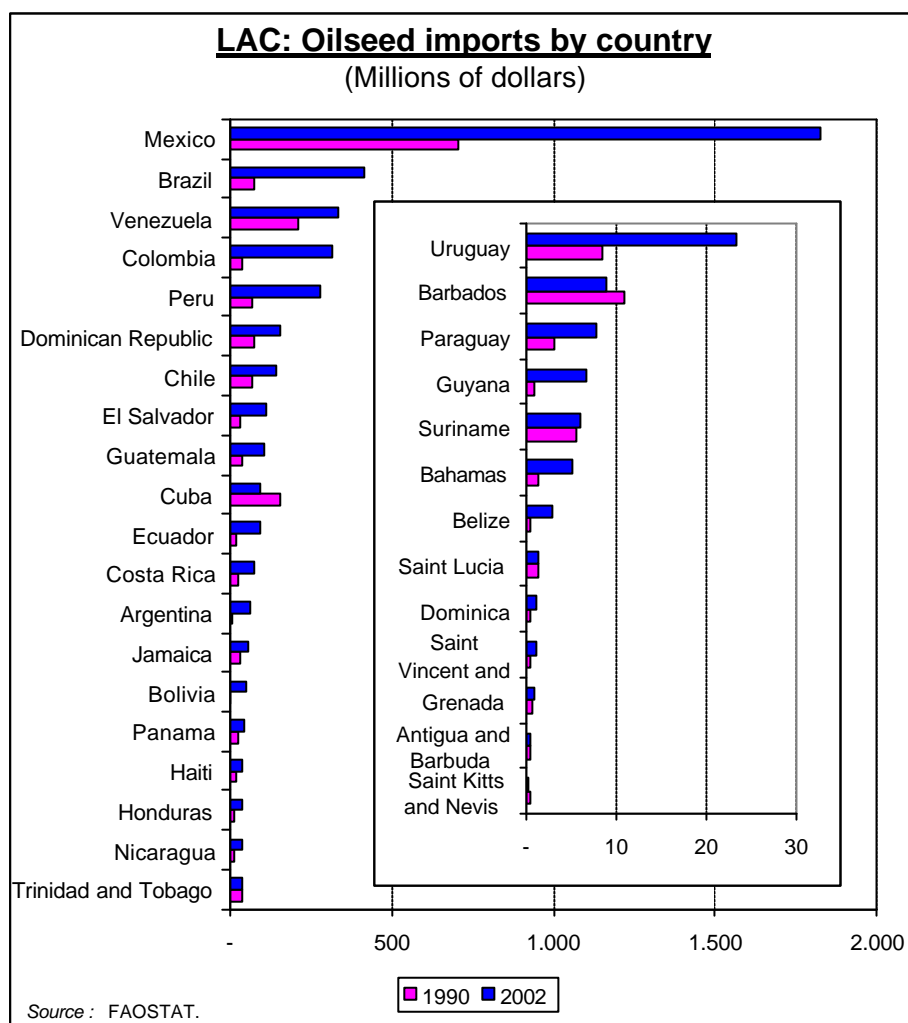
Most of the region's countries import cereals, with Mexico and Brazil being the largest importers given the size of their economies. During the last decade this concentration has intensified strongly in Mexico, following implementation of NAFTA and reflecting the relative weakness of its domestic supply. Cereal imports into that country more than doubled during the last decade. Colombia's cereal imports also grew significantly (see figure 243).

Figure 243



Oilseed imports are heavily concentrated in Mexico, and growing fast. Imports in this category also grew rapidly over the last decade, but from a smaller base, in Brazil, Colombia, Peru, El Salvador, Ecuador, Bolivia, Guyana, Bahamas and Belize (see figure 244).

Figure 244



In the other crop groups (fruit, green vegetables, pulses, coffee, sugar, plant fibres, tobacco and animal feed) the geographic distribution of imports follows a similar pattern, with concentration in Mexico and broad diffusion among most other countries of the region. In the case of tobacco imports, the Dominican Republic has registered an exceptionally high share in the last year<sup>38</sup> (see figures 245 through 252).

<sup>38</sup> The figure for tobacco imports in the Dominican Republic in 2002 is an outlier in the time series data.

Figure 245

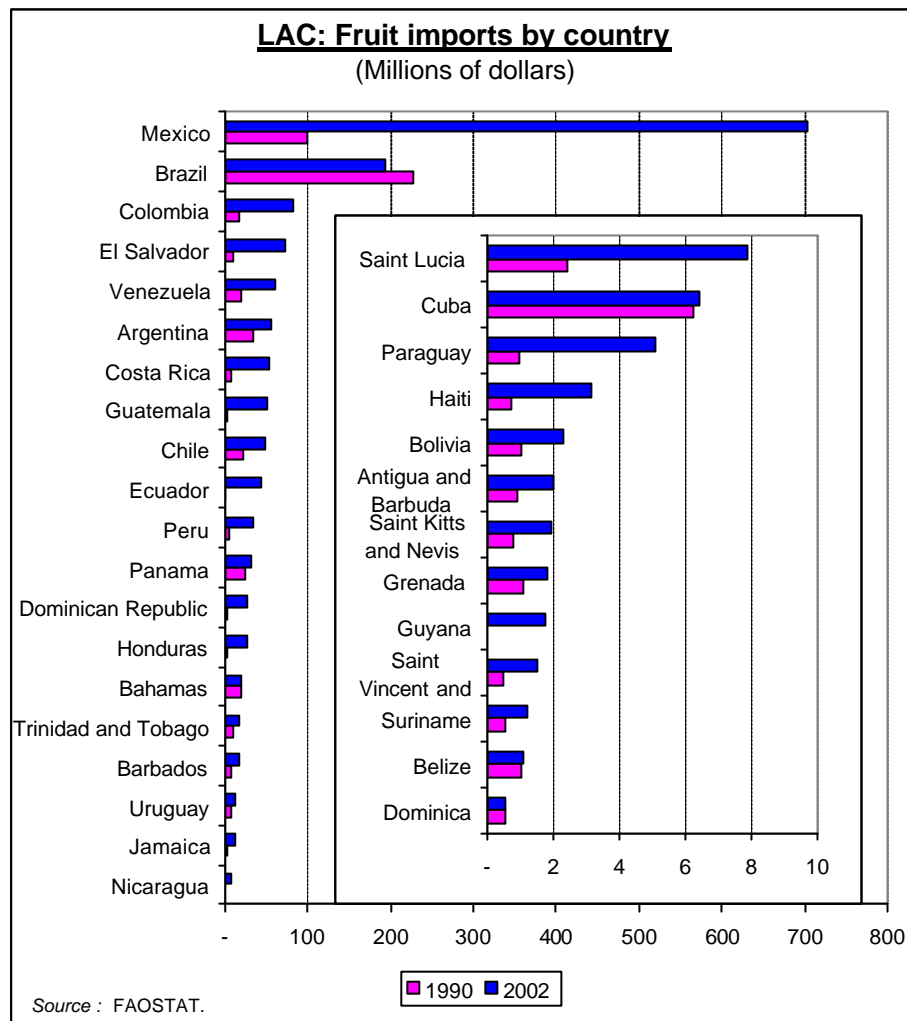


Figure 246

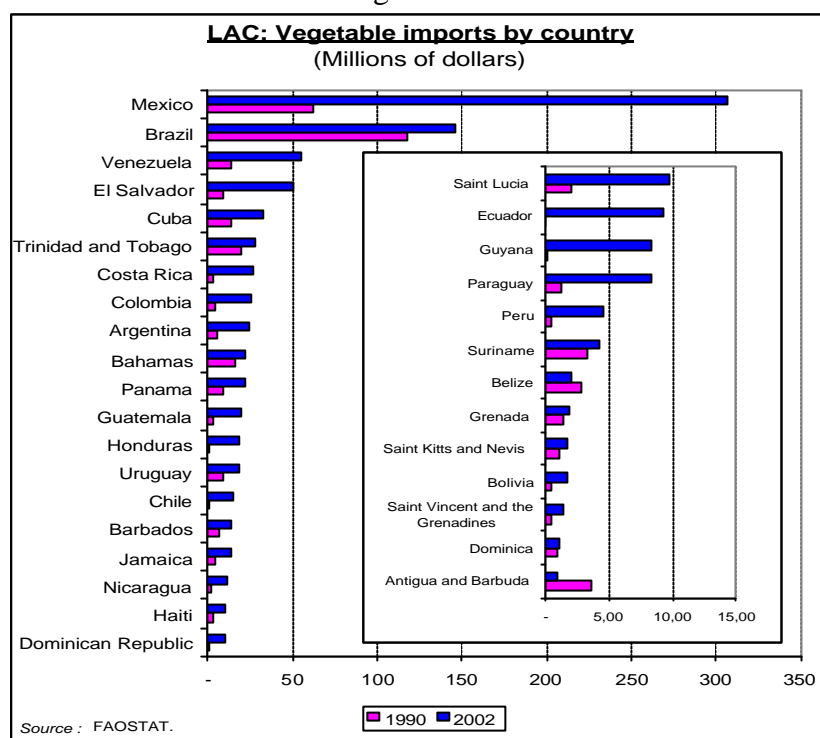


Figure 247

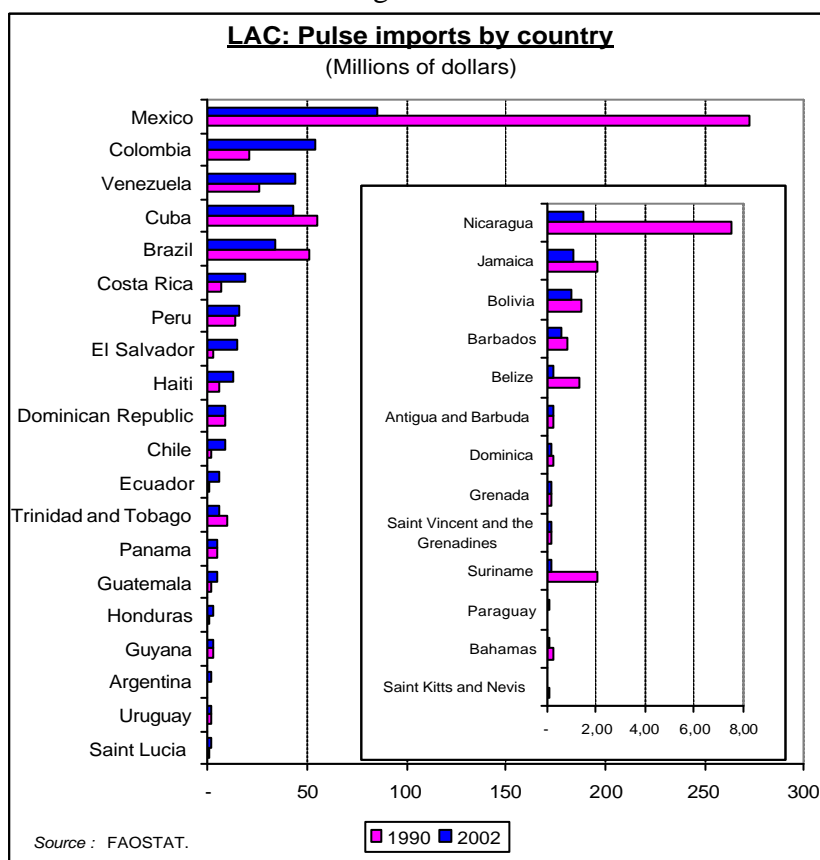




Figure 248

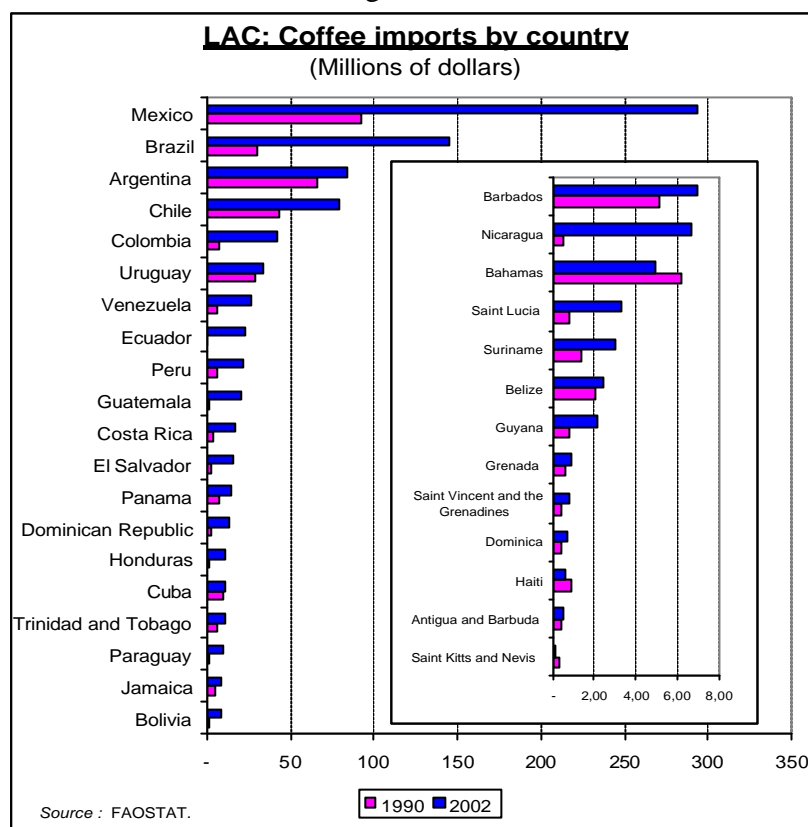


Figure 249

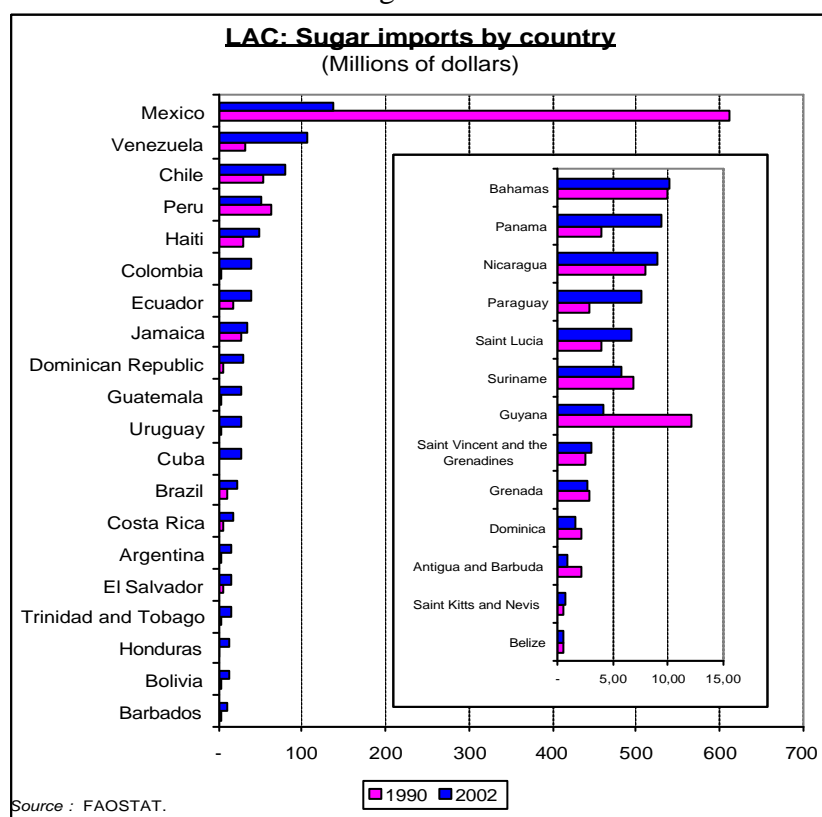


Figure 250

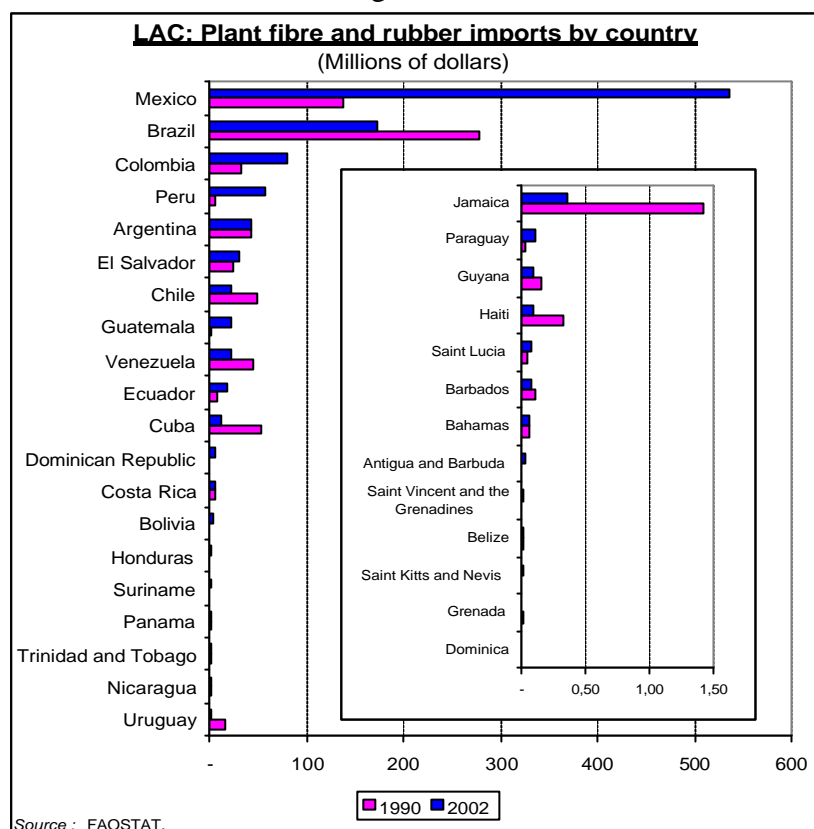


Figure 251

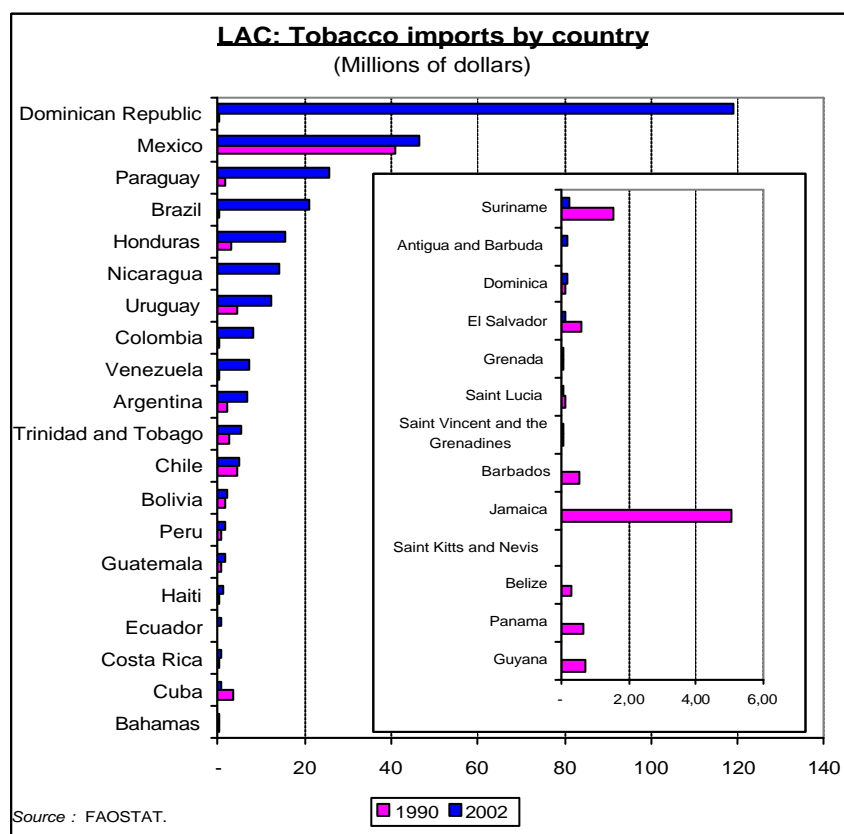
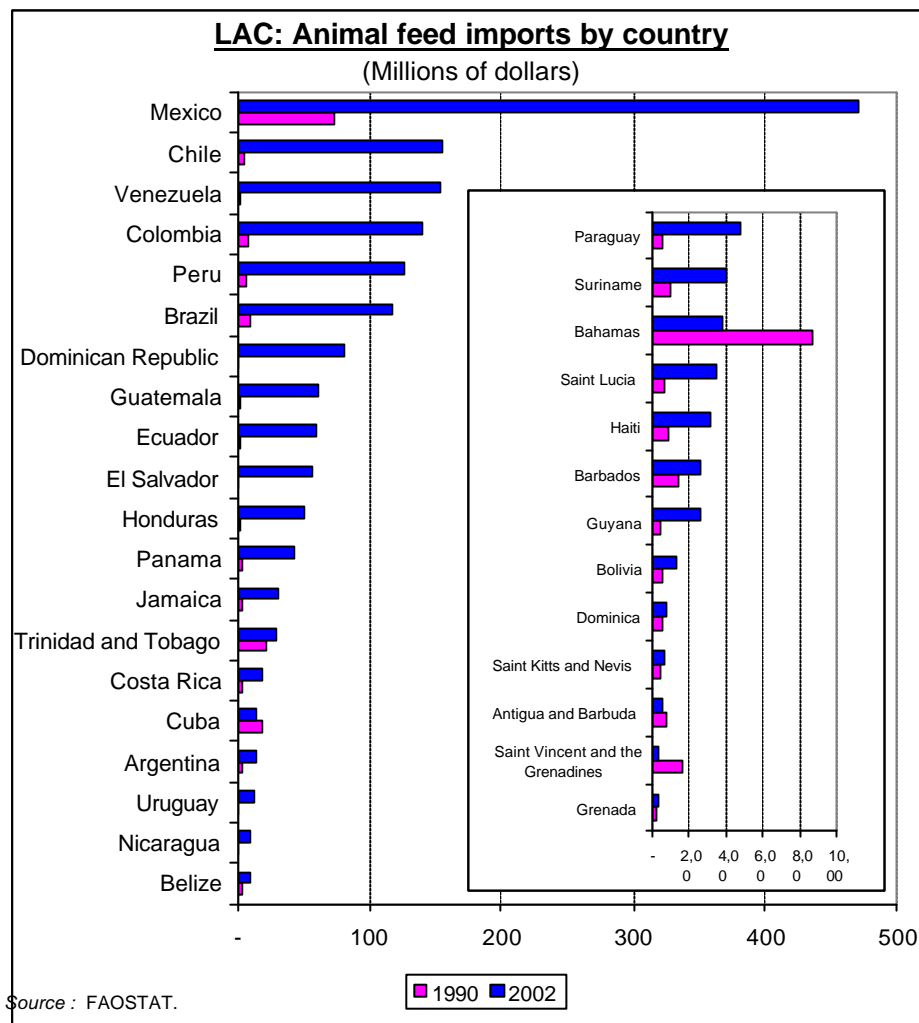


Figure 252



### C. LIVESTOCK SECTOR

International trade in livestock products is virtually in balance in Latin America and the Caribbean; exports and imports both amount to about US\$ 6 billion per year, accounting for roughly 1.6% of imports and exports in the region's overall external merchandise trade. Within overall agriculture sector trade, livestock products account for 9% of exports and 19% of imports.

During the 1980s, the small trade balance was generally positive but with a slightly declining trend. Although the balances have always been small, the result has been negative over the last decade, except in 2002, largely reflecting the slowdown in exports between 1996 and 1998 (see figures 253 and 254).

Figure 253

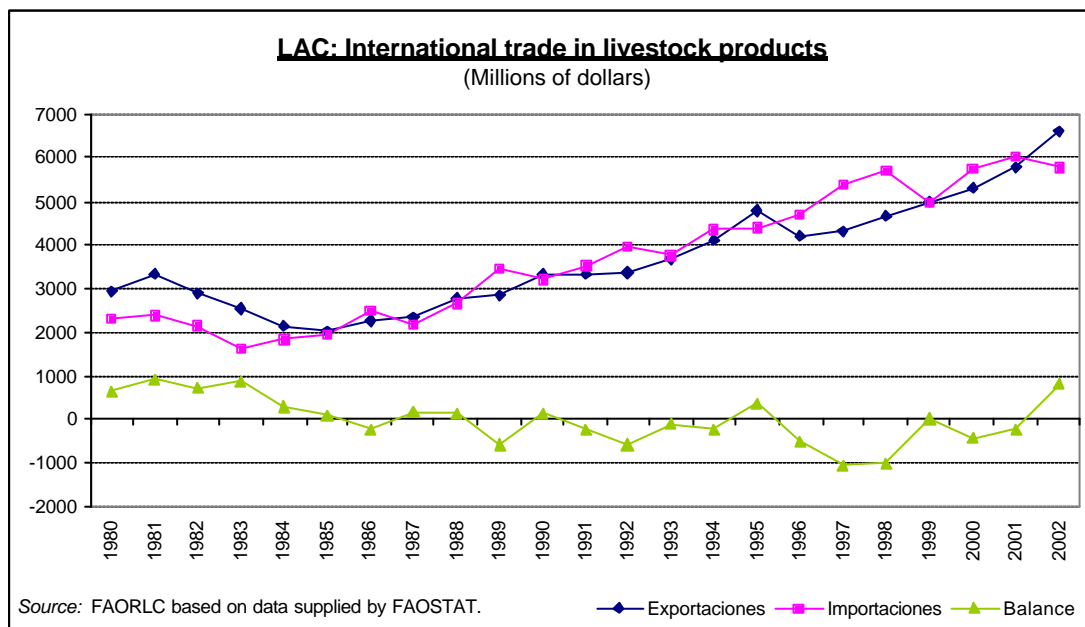
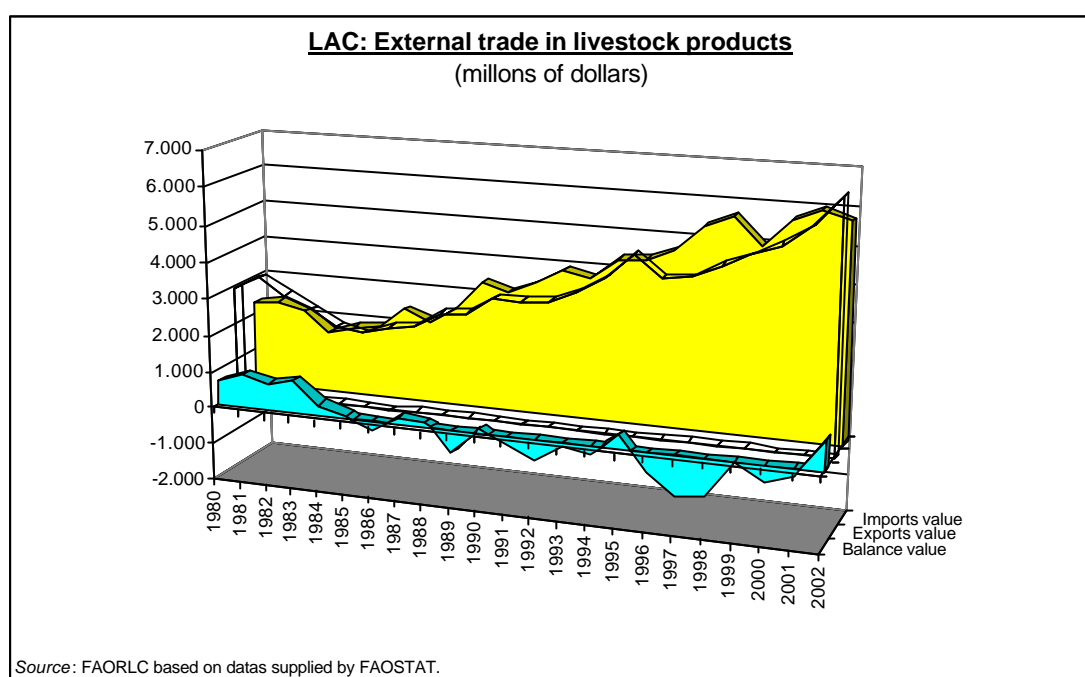


Figure 254



The subsectoral trade balance is very small because the surplus in bovine and poultry meat is offset by a deficit in dairy products. Trade in pig meat and live animals is virtually in balance, with the sign changing back and forth (see table 56).

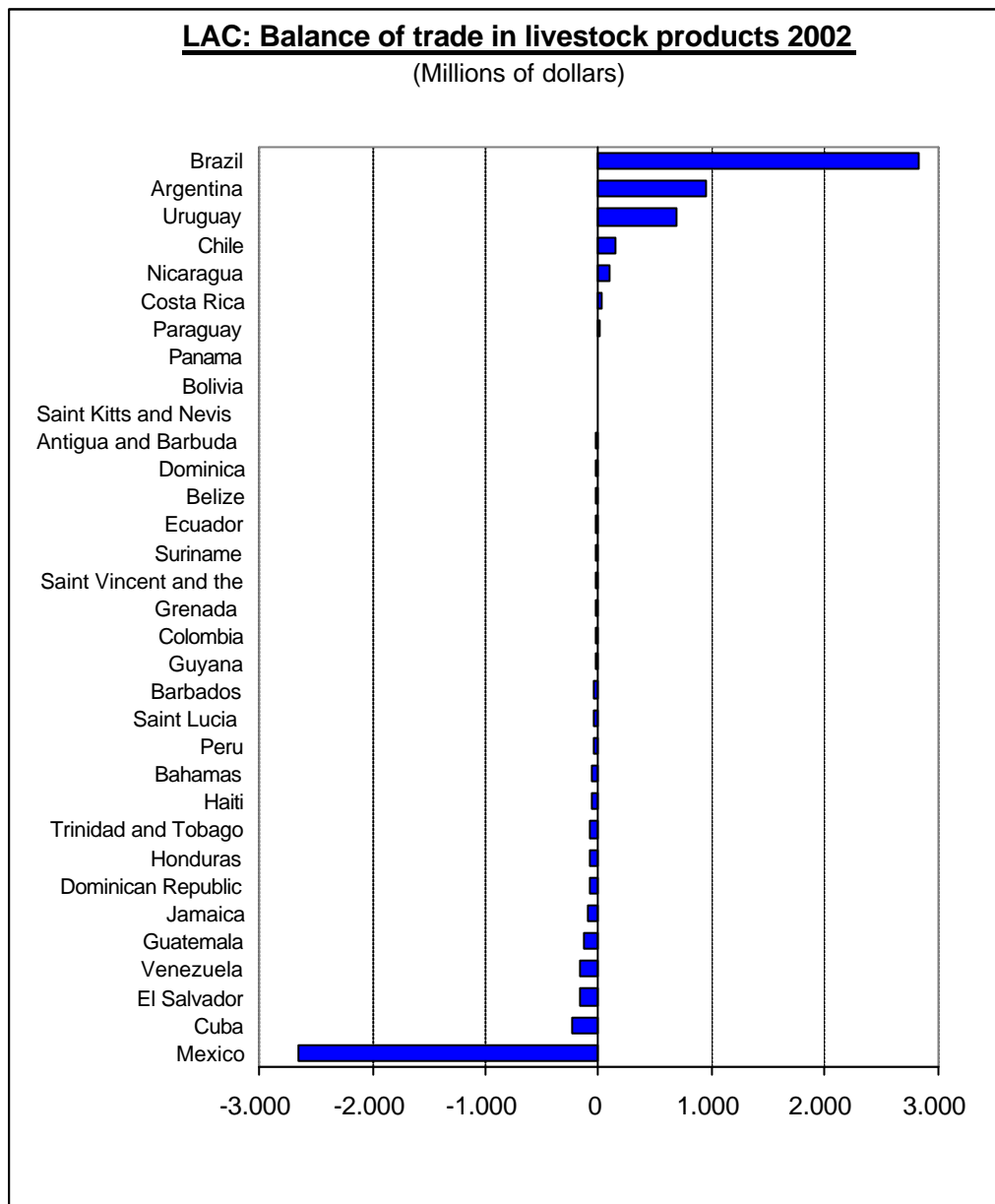
Table 56

LAC: External trade in livestock products (2002)							
Product	(Thousands of dollars)		Trade balance (Thousands of dollars)	Share (%)		Growth rate (1990-2002)	
	Exports	Imports		X	M	Exports	Imports
<b>TOTAL</b>	<b>6,099,490</b>	<b>4,926,877</b>	<b>1,172,613</b>	<b>100.0</b>	<b>100.0</b>	5.38	5.11
<i>Bovine meat</i>	2,048,809	1,454,350	594,459	33.6	29.5	1.61	9.15
<i>Poultry meat</i>	1,576,205	509,093	1,067,112	25.8	10.3	10.04	6.77
<i>Pigmeat</i>	902,566	551,420	351,146	14.8	11.2	23.66	11.10
<i>Sheepmeat</i>	34,437	89,880	-55,443	0.6	1.8	0.03	9.31
<i>Goatmeat</i>	174	2,146	-1,972	0.0	0.0	-1.22	-5.16
<i>Other meats</i>	106,775	50,587	56,188	1.8	1.0	1.39	-2.34
<i>Dairy products and eggs</i>	730,857	1,864,326	-1,133,469	12.0	37.8	14.20	3.54
<i>Live animals</i>	444,734	352,139	92,595	7.3	7.1	-0.13	1.65
<i>Animal fibre</i>	254,933	52,936	201,997	4.2	1.1	-5.46	0.10

Source: FAORLC based on FAOSTAT data.

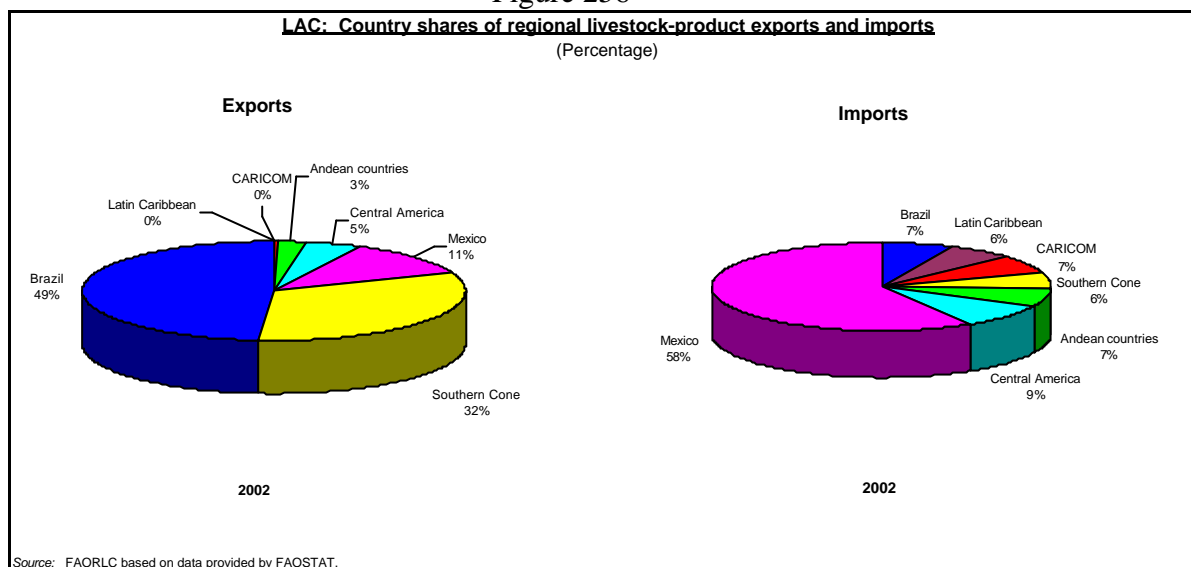
Trade in livestock products is also in balance in most countries considered individually. Among surplus countries only Brazil, Argentina, Chile, Uruguay and Nicaragua displayed relatively large balances; in the two latter countries, the livestock balance accounts for a particularly large share of their overall trade balance. Among deficit countries, most of the negative balance is concentrated in Mexico, given its size; but, in relative terms, there are also significant deficits in several Central American countries (El Salvador, Guatemala and Honduras), and a number of Caribbean countries (Cuba, Haiti, Saint Lucia, Dominica, Grenada, Guyana, Bahamas and Barbados) (see figure 255).

Figure 255



Despite the relatively small scale of trade balances in this subsector, there is clear differentiation in the balances recorded between countries. As much as 81% of exports come from Brazil and the southern cone countries; whereas Mexico is the destination for 58% of livestock-product imports (see figure 256).

Figure 256

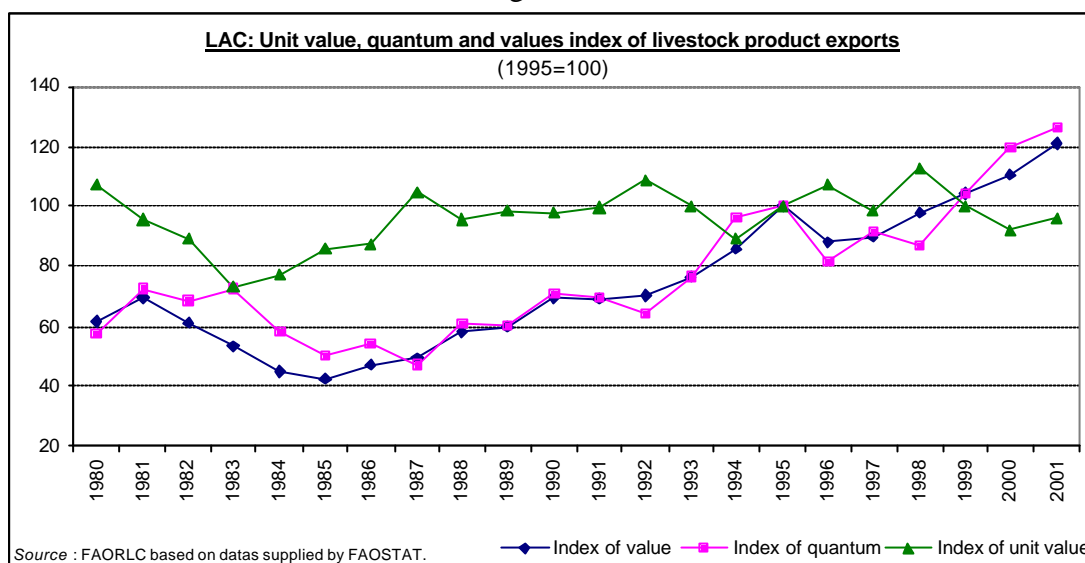


(i) *Exports*

During the 1980s, exports of livestock products from Latin America and the Caribbean were little changed, posting a slightly negative average growth rate of -0.2% per year. The slight reduction that occurred in the first half of the decade was offset by an increase, also moderate, during the second half. As from 1992, chicken meat exports from Brazil grew strongly, supported by sharp percentage rise in bovine meat exports in that country after 1997, and a year later also in Mexico and Nicaragua, albeit involving smaller absolute amounts. A number of other countries also saw rapid growth, but with less effect on the regional totals. The result was an average growth rate of 5.3% per year during the decade.

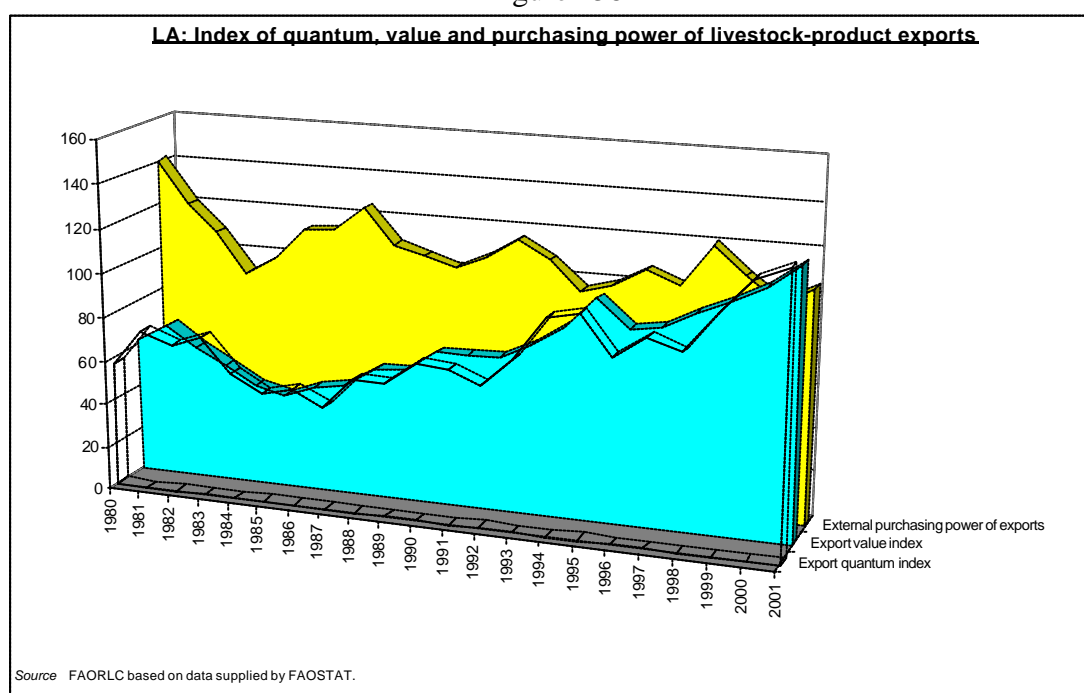
The main explanation for this acceleration can be found on the supply side, especially in the development of poultry production, while international prices have had relatively neutral effects on the subsector overall. The export quantum index rose by 44% between 1992 and 1995; and, following an interruption of the rising trend in 1996-1998, it then grew by a further 53% between then and 2002. These represent significant increases in export volumes, based on profitable technology models, fundamentally in Brazil (see figure 257).

Figure 257



Although international prices have had a neutral effect on exports in this subsector, their purchasing power was reduced sharply during the early 1980s by a relative rise in import prices. Since 1984, the erosion of purchasing power has been less, but constant, as import prices have not risen while exports have expanded continuously (see figure 258).

Figure 258



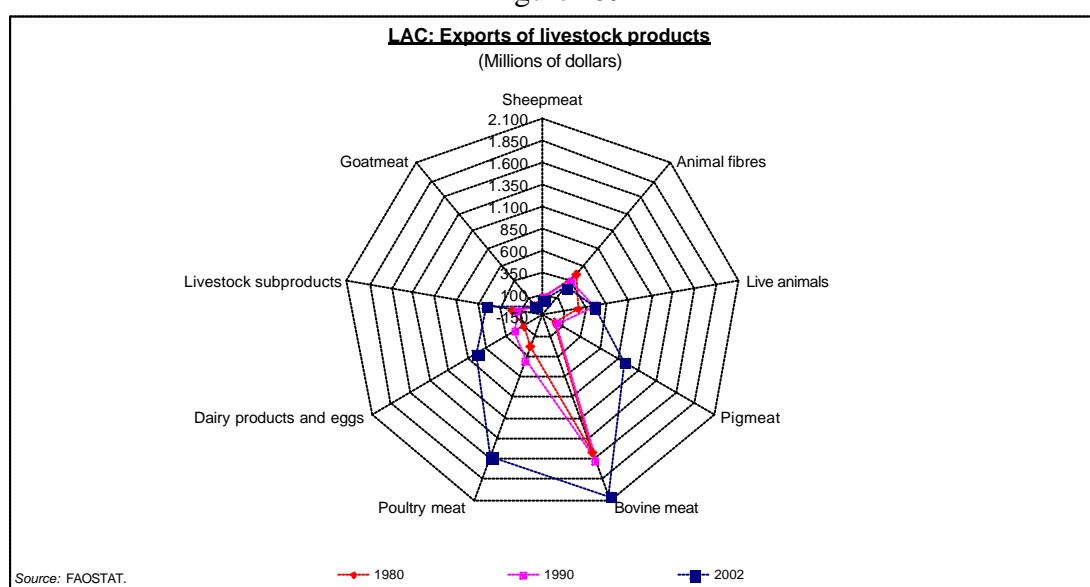
### *Composition of livestock product exports*

The structure of the region's exports in the livestock subsector has altered significantly during the last decade. Until the early years of the 1990s, bovine meat exports represented the absolute majority, despite hardly growing during the 1980s.



Wool exports were less important and also declined rapidly from the 1980s onwards, along with exports of animals on the hoof – basically yearling cattle exported by Mexico for fattening in the United States, taking advantage of lower fodder costs. The last decade witnessed significant changes, the most significant being the exceptional growth in poultry meat exports, which expanded from US\$ 400 million in 1990 to over US\$ 1.6 billion in 2002. Practically all of this increase occurred in Brazil (see figure 259).

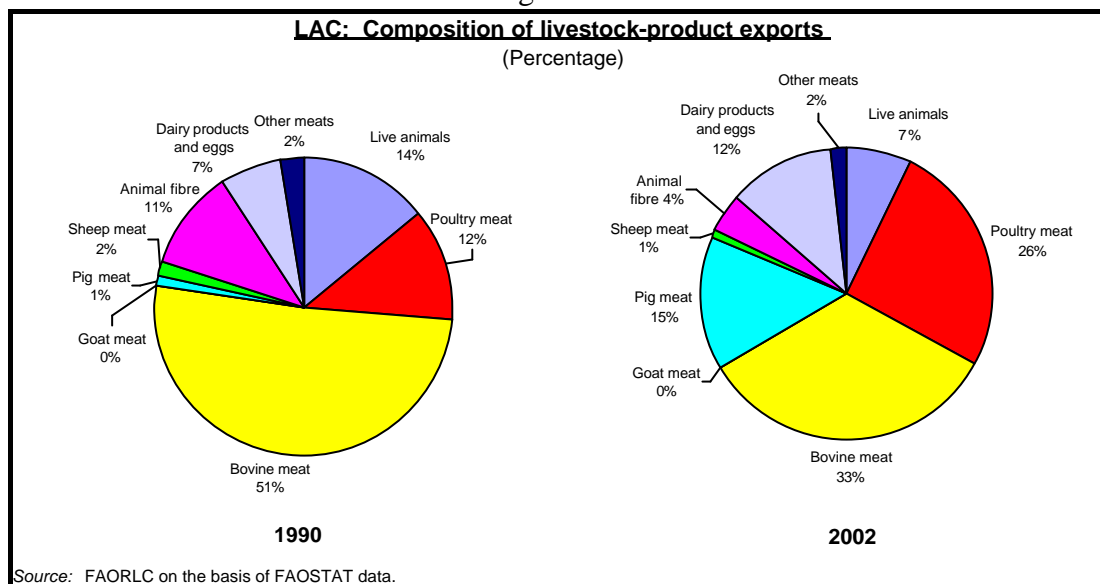
Figure 259



Exports of pig meat also grew vigorously during the decade: having been practically non-existent at the start of the 1990s, the US\$ 900 million mark was attained by 2002. Half of this increase occurred in Brazil and nearly all the rest in Chile and Mexico. Exports of dairy products and eggs also grew strongly, albeit on a more modest scale, mostly in Argentina.

The composition of livestock exports was thus very different from the situation in 1990. The share of bovine meat fell from over half (51%) to just one third (33%); the share of wool exports also dropped from 11% to just 4%. In contrast, poultry meat exports expanded from 12% to 26% of the subsectoral total. There were also increased shares for pig meat (from 1% to 15%), and dairy products and eggs (from 7% to 12%) (see figure 260).

Figure 260



### *Geographic distribution of livestock exports*

The location of livestock exports has varied significantly during the last decade. Until 1990, Argentina was the leading exporter, followed relatively closely by Brazil, Uruguay, Mexico, and in smaller amounts, by Paraguay, Chile, Bolivia and a number of Central American countries. Since then, the exceptionally strong growth of exports from Brazil, which have increased fivefold between 1990 and 2002, has resulted in a heavy concentration of the region's livestock exports in this country. Brazil's share of the regional total grew from 20% in 1990 to almost half (49%) in 2002. As counterpart, the share of southern cone countries dropped from 58% to 32% (see figures 261 and 262).

Figure 261

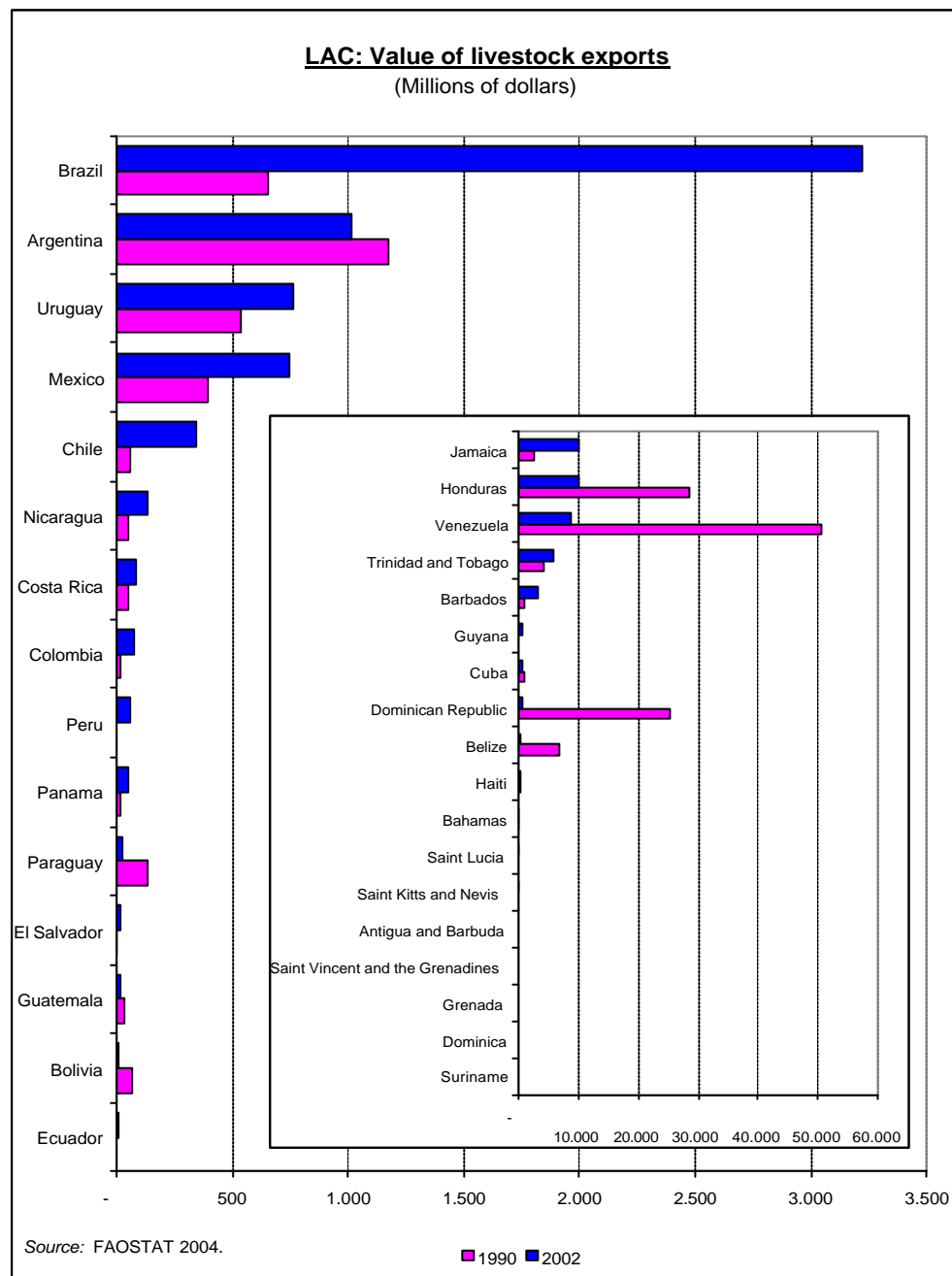
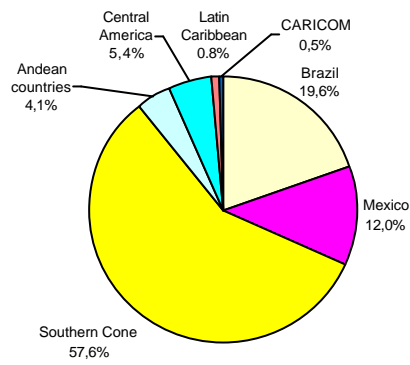


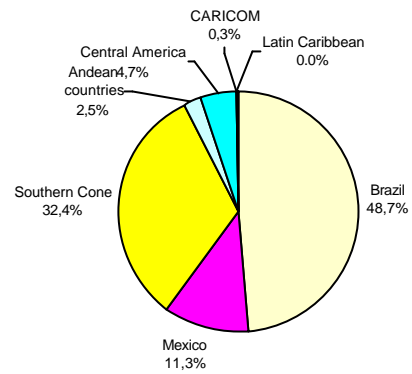
Figure 262

### **LAC: Subregional shares of livestock-product exports**

(Percentage)



**1990**

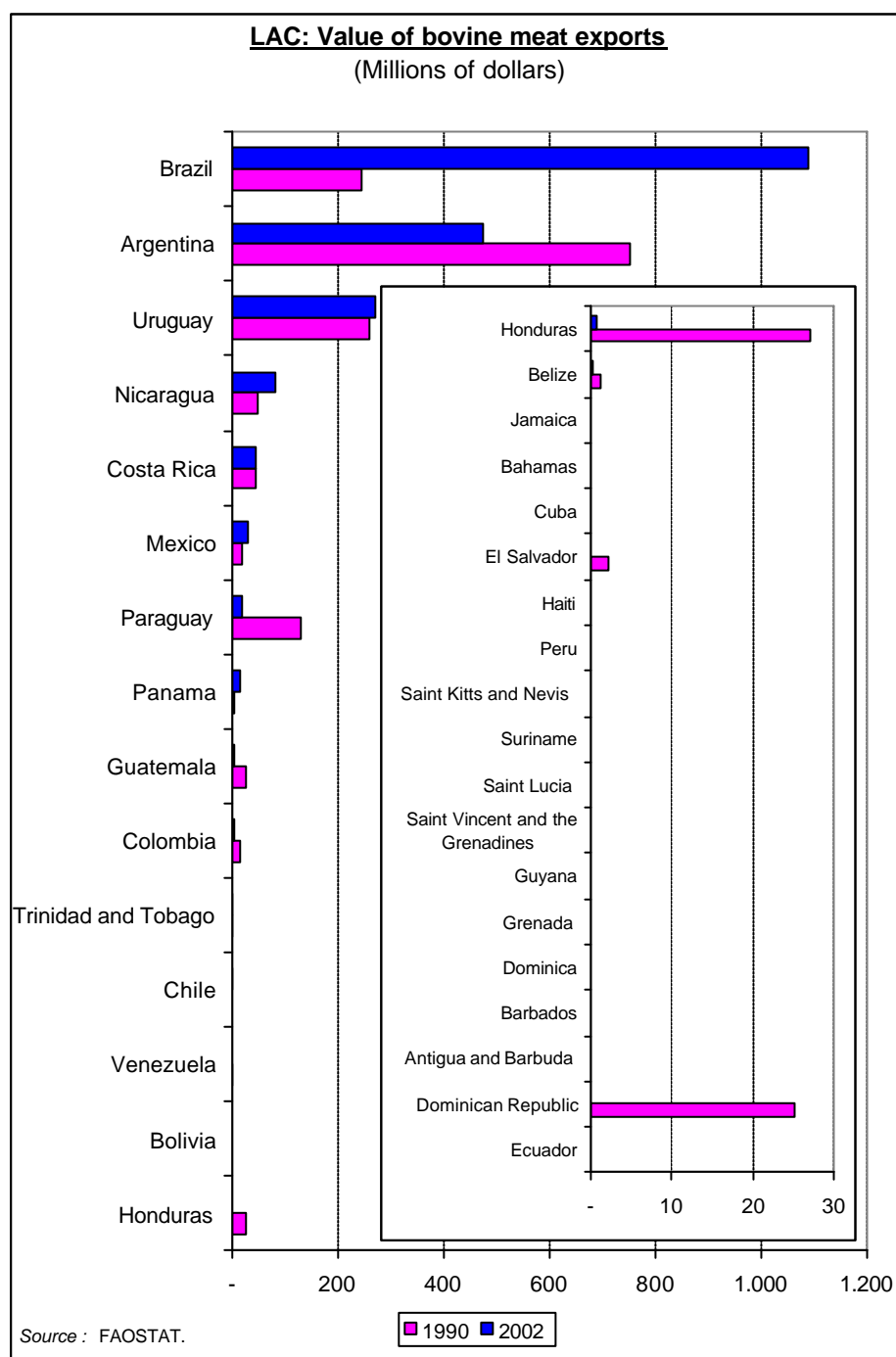


**2002**

Source: FAOSTAT.

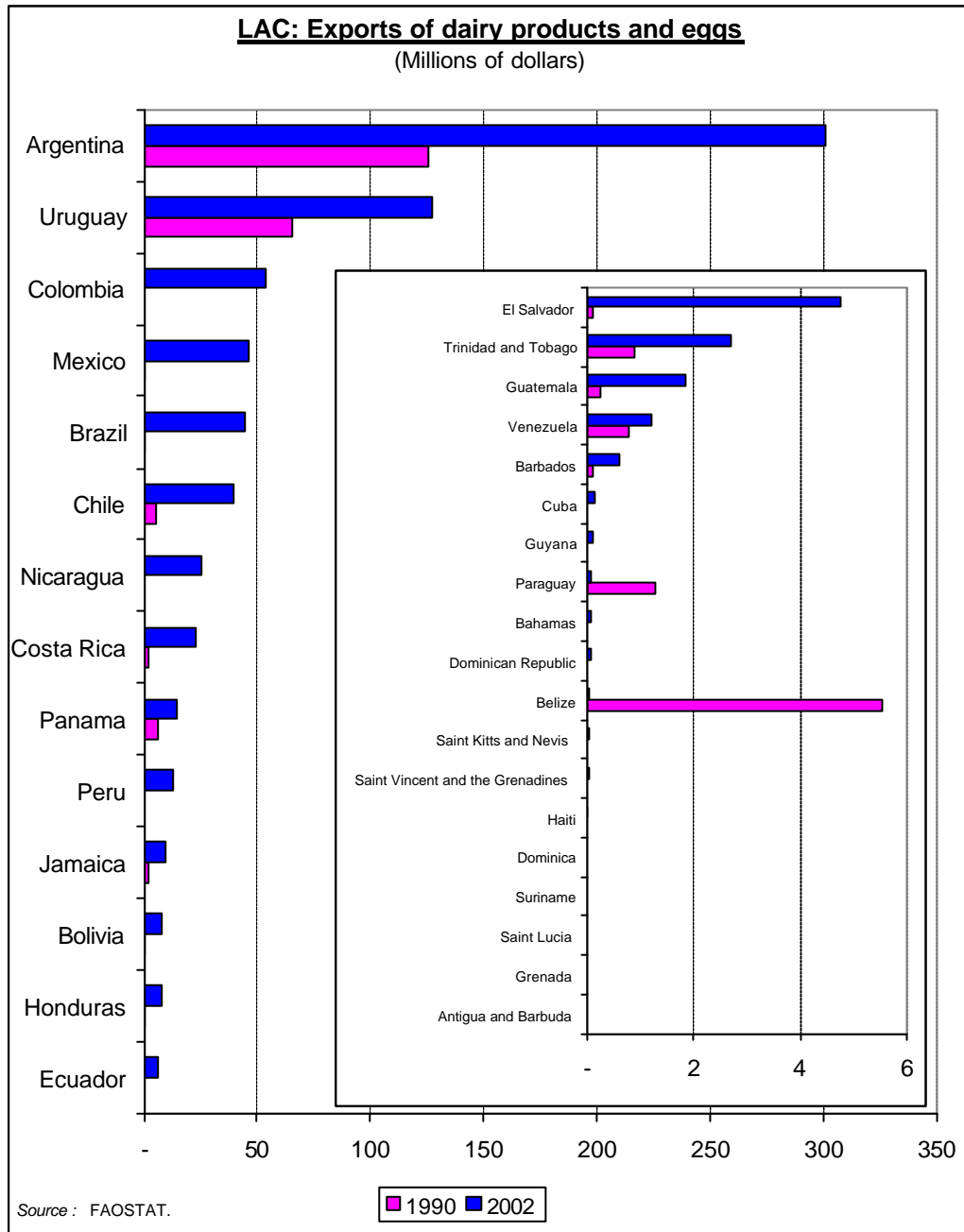
The changes in the geographic distribution of bovine meat exports largely follow the pattern displayed by the subsector as a whole, the most significant change being the concentration of exports in Brazil (see figure 263).

Figure 263



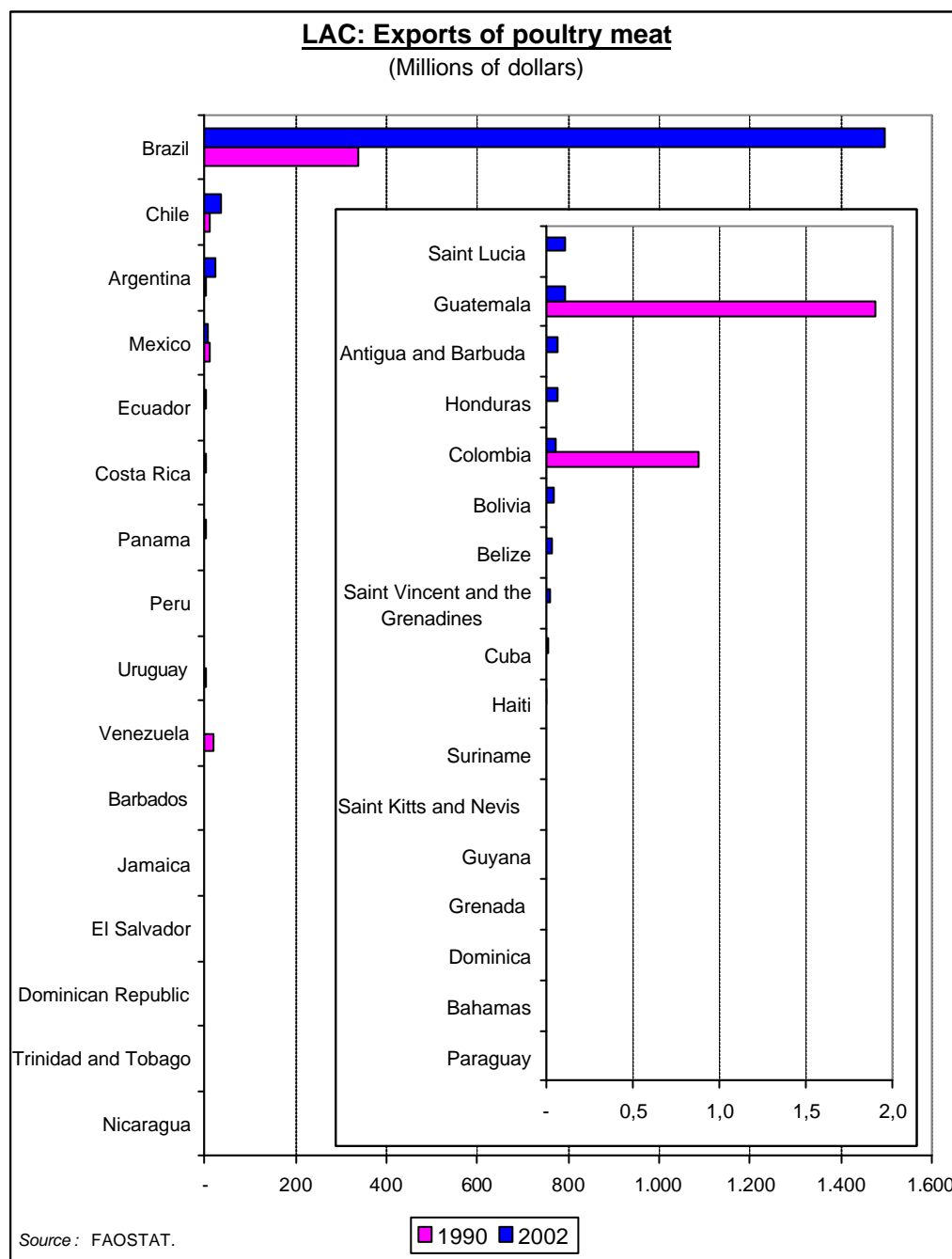
Over last decade, Argentine exports of dairy products and eggs grew strongly, thereby increasing their level of concentration. At the same time, exports also grew substantially in other countries which had previously exported only minimal amounts of these products, such as Colombia, Brazil, Mexico and Chile. There were also significant increases in exports from Central American countries (see figure 264).

Figure 264



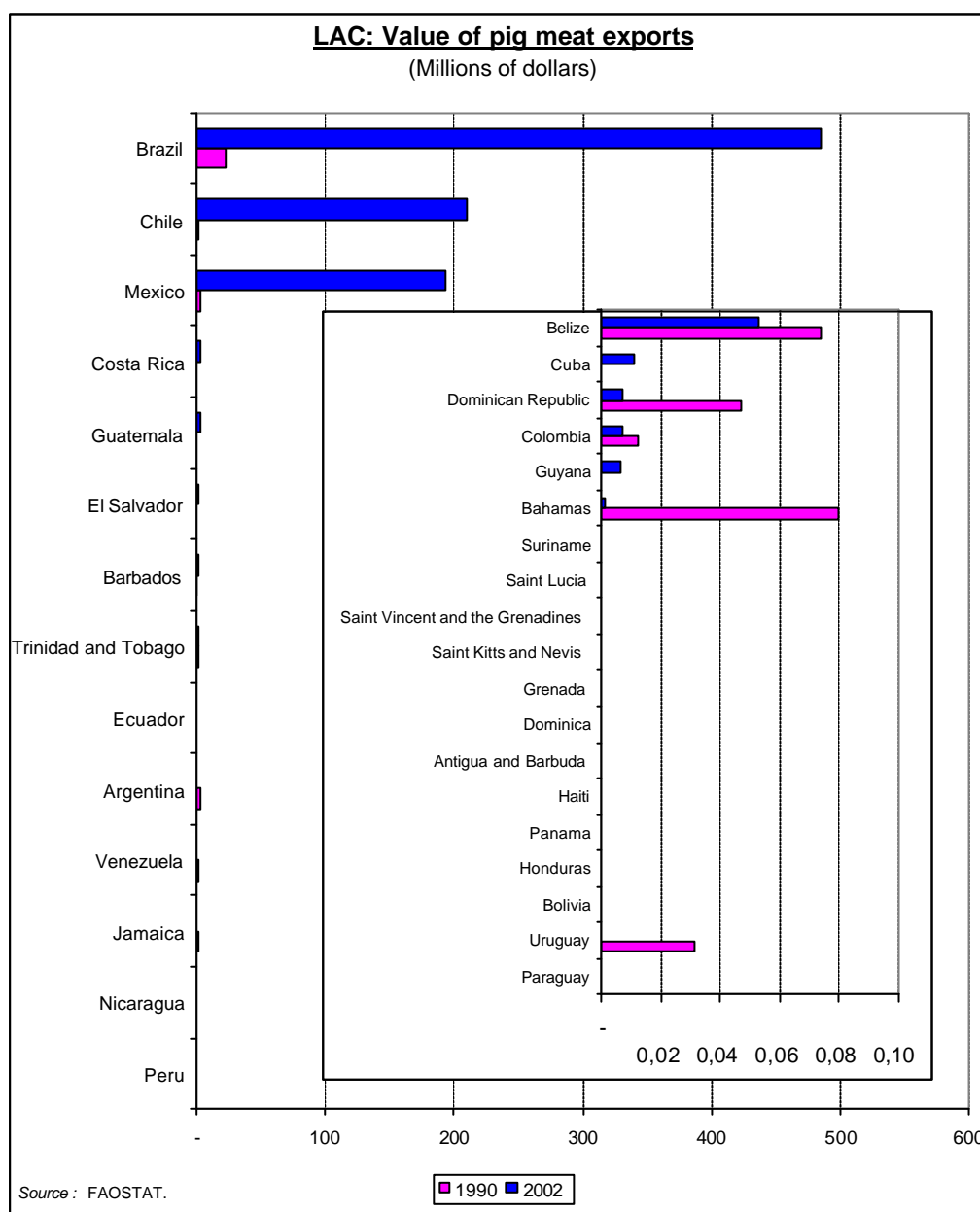
The change in the geographic distribution of exports of poultry meat merely reflects the huge increase in exports from Brazil; no other country in the region had previously sold significant quantities of this product, and Brazil currently claims 95% of the regional total (see figure 265).

Figure 265



Exports of pig meat only began to be significant during the last decade, and were concentrated essentially in Brazil. Nonetheless both Chile and Mexico now have significant external sales of this product (see figure 266).

Figure 266

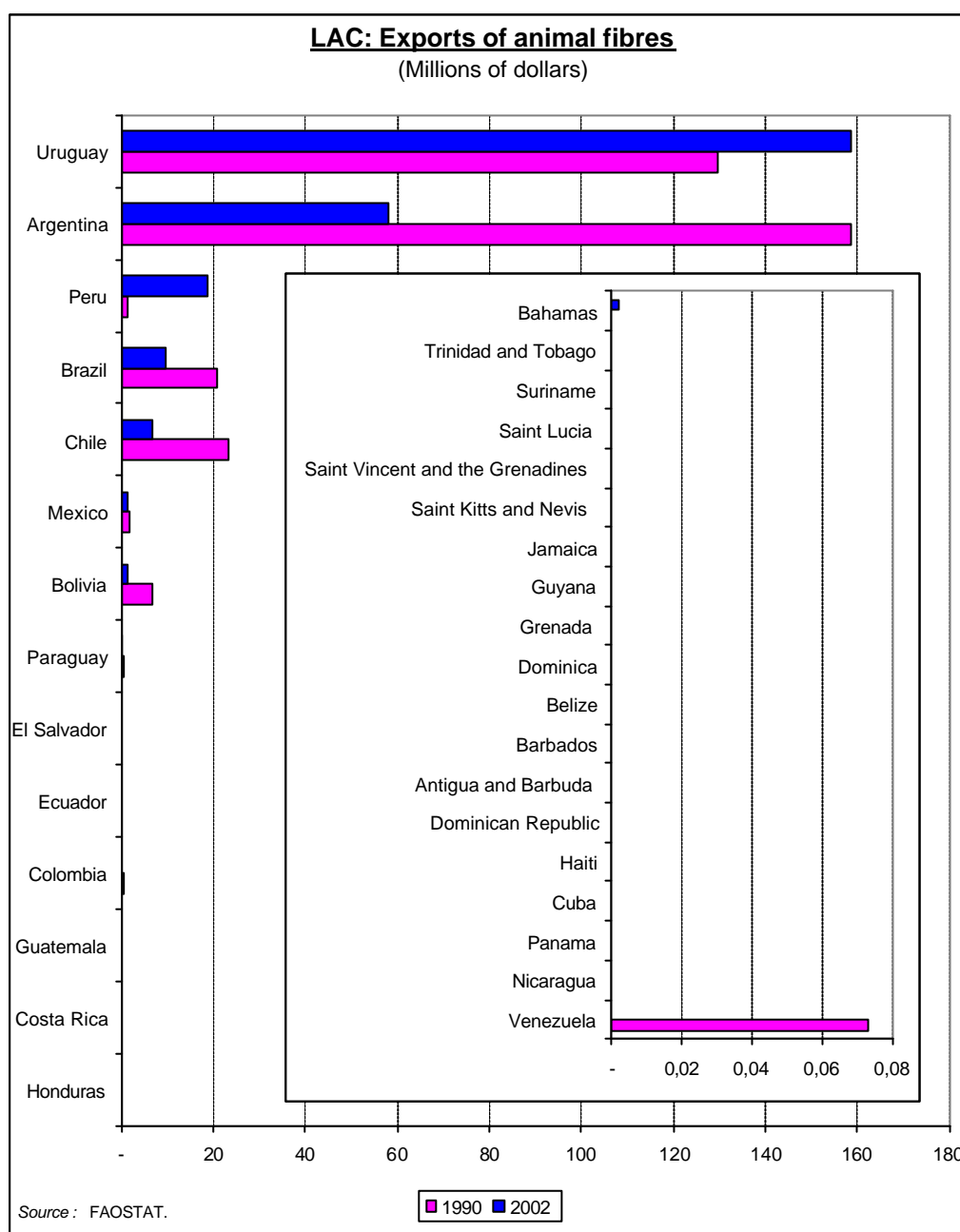


Exports of animal fibres, mostly wool, are concentrated in Argentina and Uruguay, but have been decreasing fast over the last few decades<sup>39</sup> (see figure 267).

<sup>39</sup> The 2002 figure for wool exports in Uruguay is higher than its 1990 level; but this only reflects what happened in 2002 itself, since this export category had been declining rapidly in previous years.

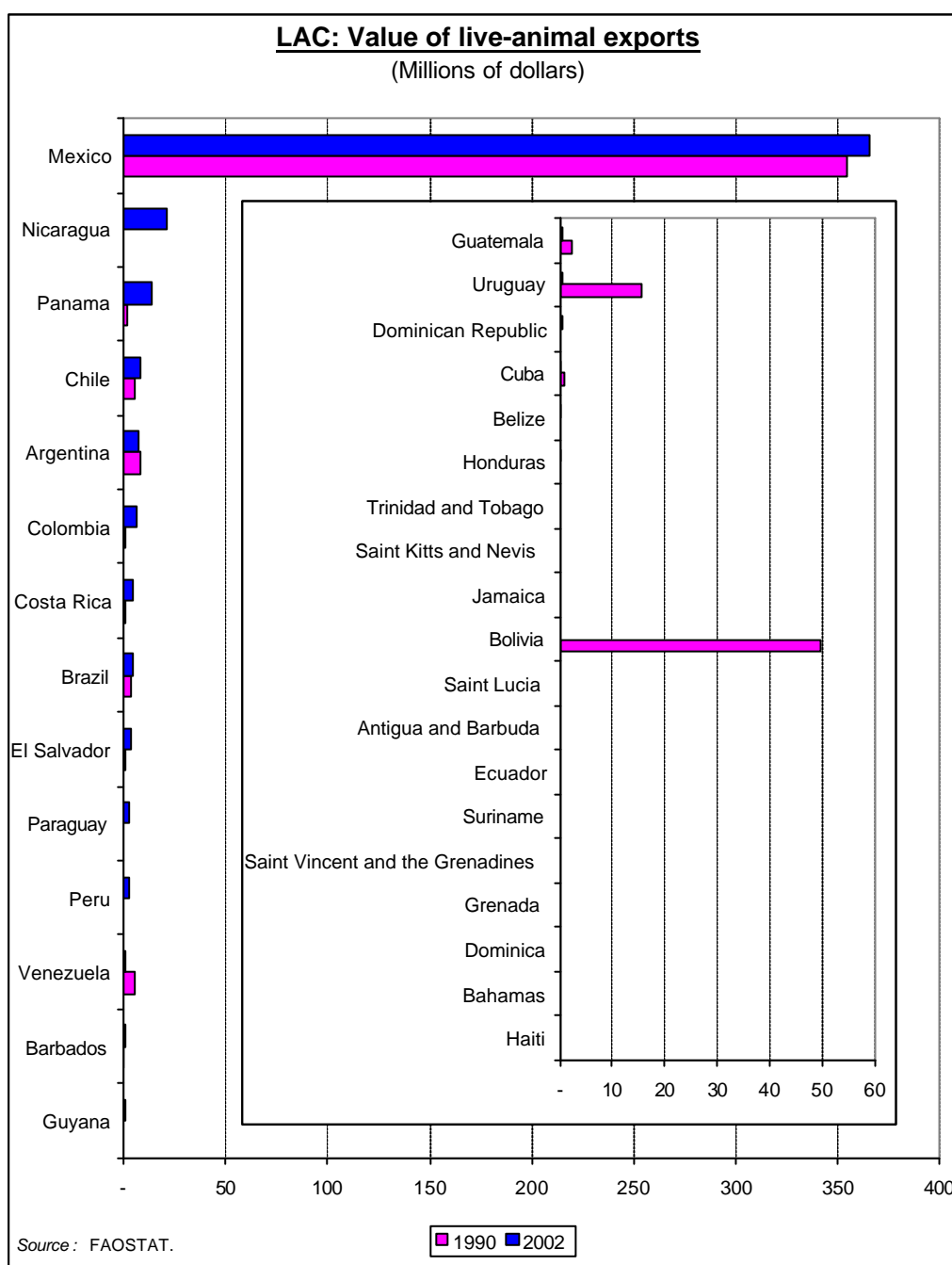


Figure 267



Most live-animal exports originate in Mexico and consist of cattle that are born taking advantage of the rainy season in that country, and after weaning are sold to the United States for fattening, since it would not be profitable to feed them in Mexico during the dry season; moreover, ratios between meat prices and the cost of feed and concentrates are more favourable in the United States (see figure 268).

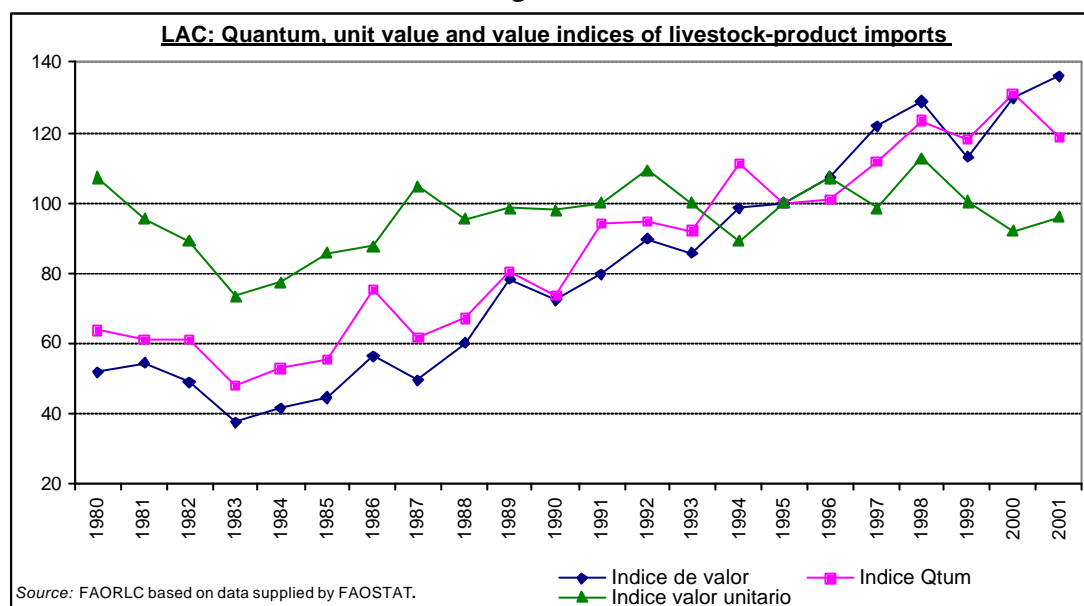
Figure 268



(ii) Imports

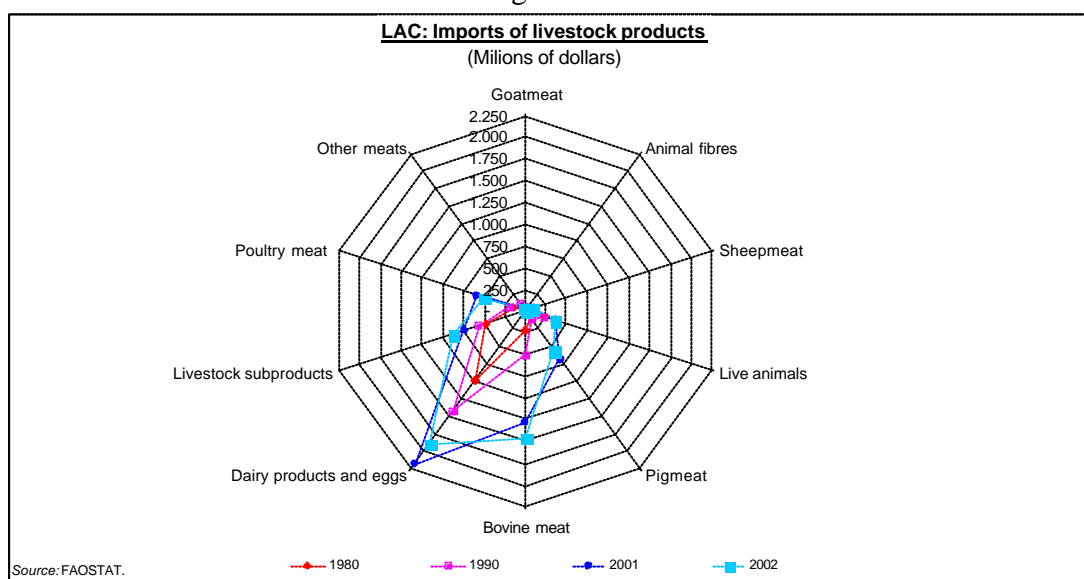
Imports of livestock products have grown steadily since 1983, in particular reflecting the rapid increase in Mexican imports of bovine meat and dairy products. During the 1990s, the pace of growth accelerated somewhat, to post an annual average rate of 5.2% over the last decade. Growth was almost exclusively due to larger import volumes, given that international prices since 1987 have displayed small fluctuations that cancel each other out in the medium-term (see figure 269).

Figure 269



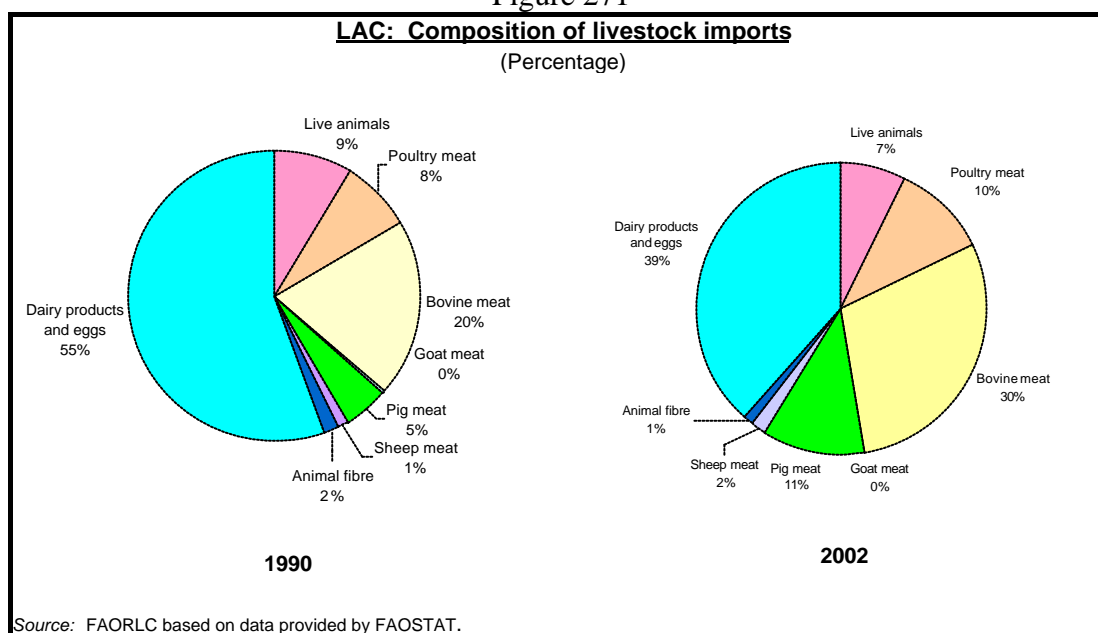
Until the 1980s, milk accounted for about half of the region's total livestock-product imports. During that decade, as a result of the economic crisis and a contraction in both income and consumption, livestock product imports declined or stagnated in most countries, with only Mexico and Brazil displaying significant growth. During the 1990s, in contrast, an expansion in milk imports was supported by growth in bovine meat purchases, partly explained by subregional trade within MERCOSUR. Imports of pig meat also grew, albeit to a lesser extent (see figure 270).

Figure 270



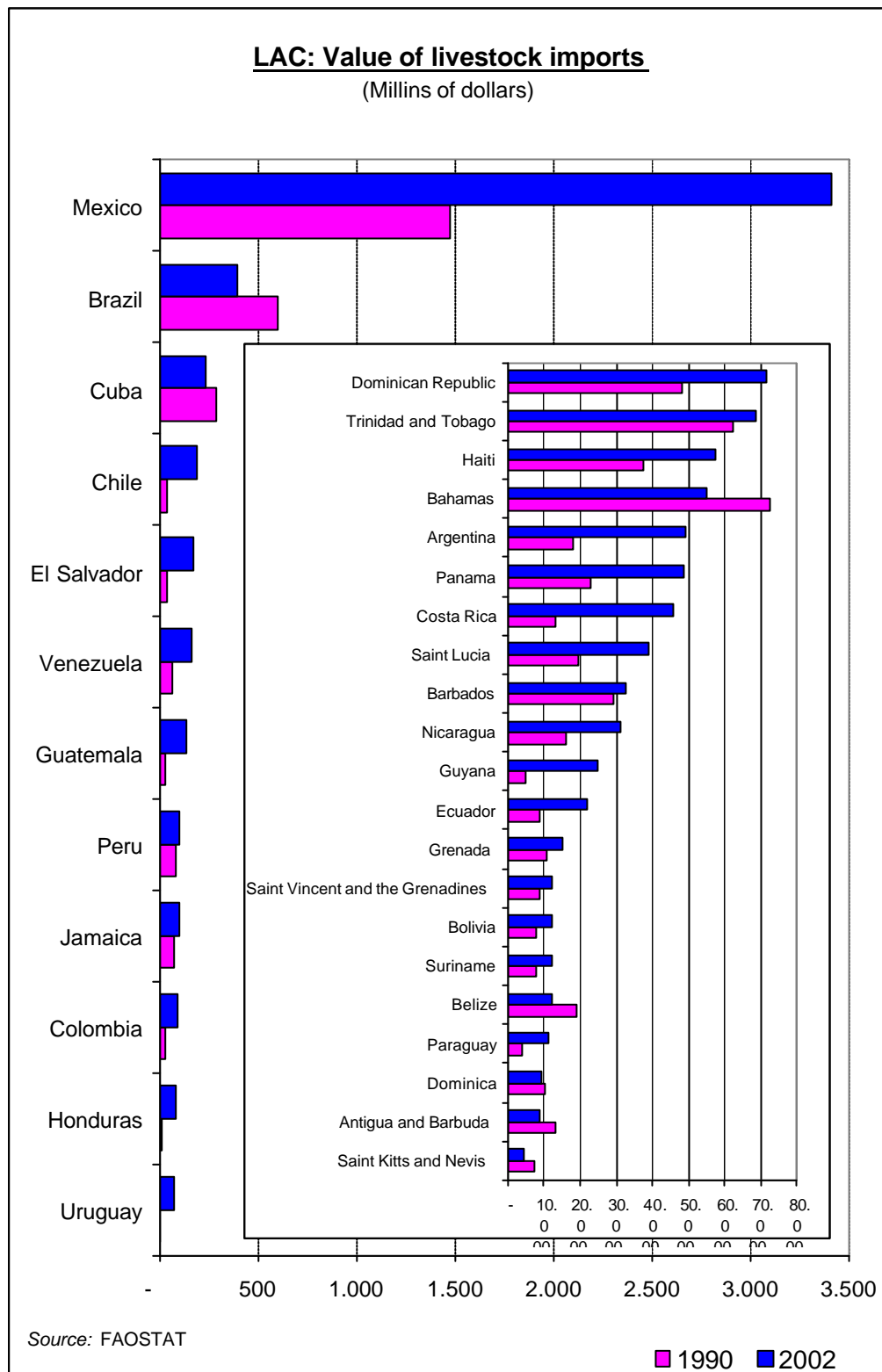
As a consequence, livestock imports diversified. The share of dairy products and eggs shrank from 55% to 39%; the share of bovine meat imports grew from 20% to 30%, and that of pig meat from 5% to 11% (see figure 271).

Figure 271



During the last decade, while Mexican imports recorded larger absolute amounts, livestock-product imports grew rapidly in most countries in relative terms, except for Brazil where domestic supply expanded vigorously. Although Mexican imports continued to grow fastest, in relative terms there was also rapid growth in Chile, Uruguay and Central American countries. There were also significant increases in the Caribbean, particularly in Guyana, Suriname and Haiti (see figure 272).

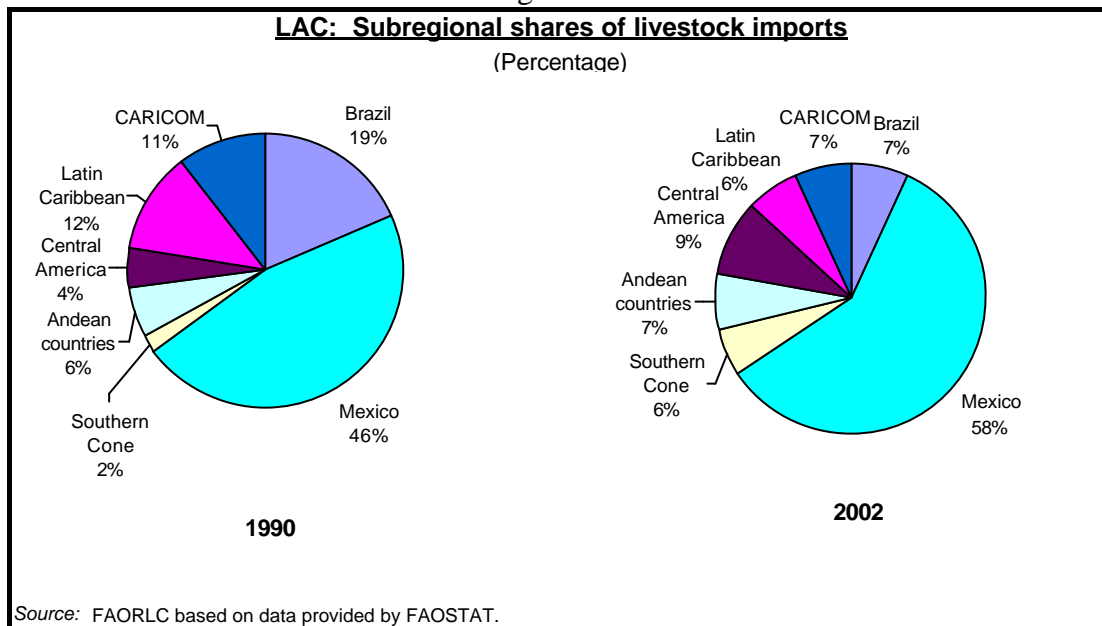
Figure 272



### *Geographic distribution of livestock imports*

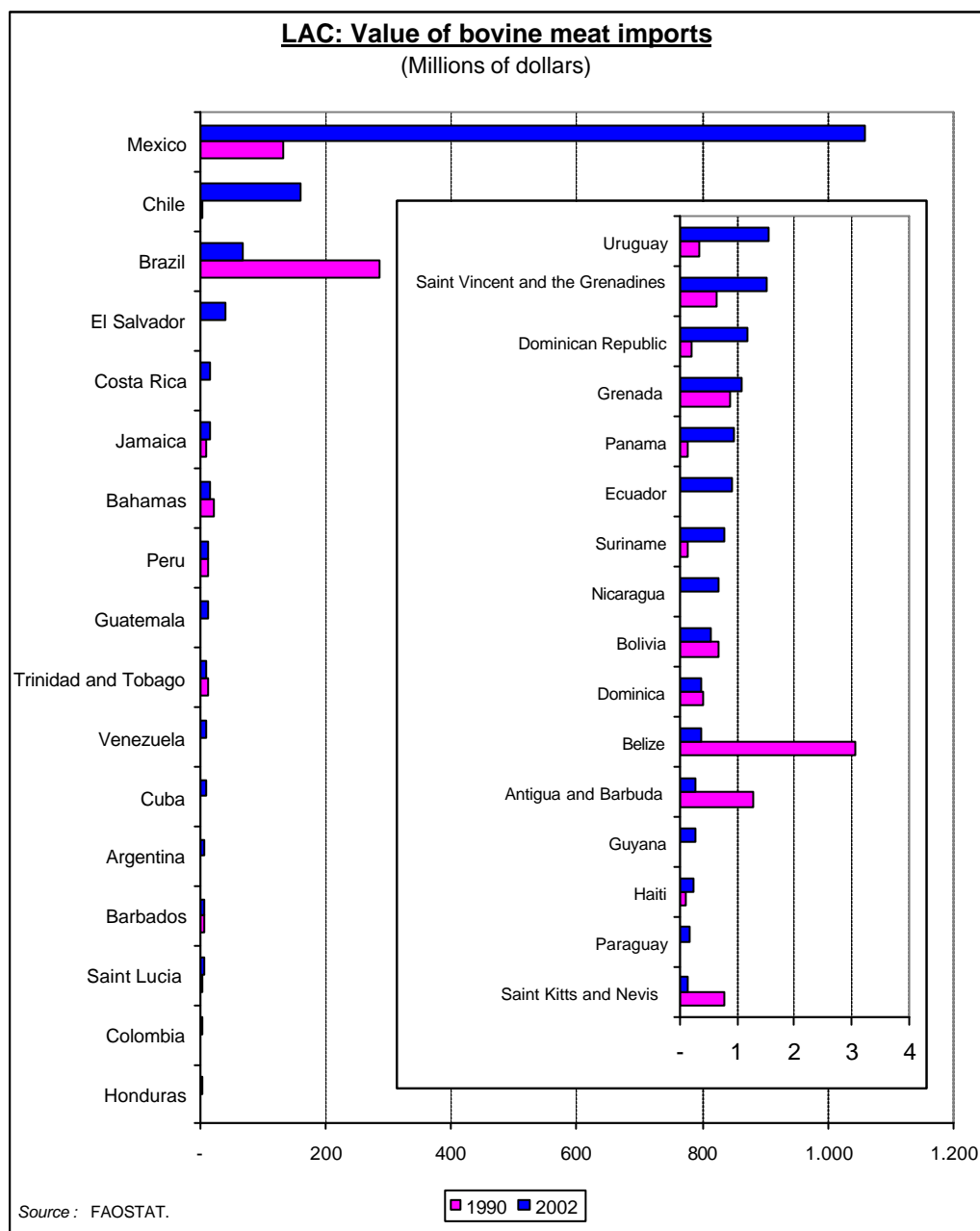
During the decade, the relative importance of countries as destinations for livestock-product imports changed significantly. The share going to Mexico grew substantially, from 46% to 58%, thereby accentuating the heavy concentration of livestock-product imports in this country. The share received by Central American countries more than doubled (except in Nicaragua), from 4% to 9%. The share of imports received by southern cone countries also grew, largely as a result of trade between MERCOSUR members. In contrast, the largest relative decline occurred in Brazil, whose share of livestock-product imports plummeted from 19% to 7% (see figure 273).

Figure 273



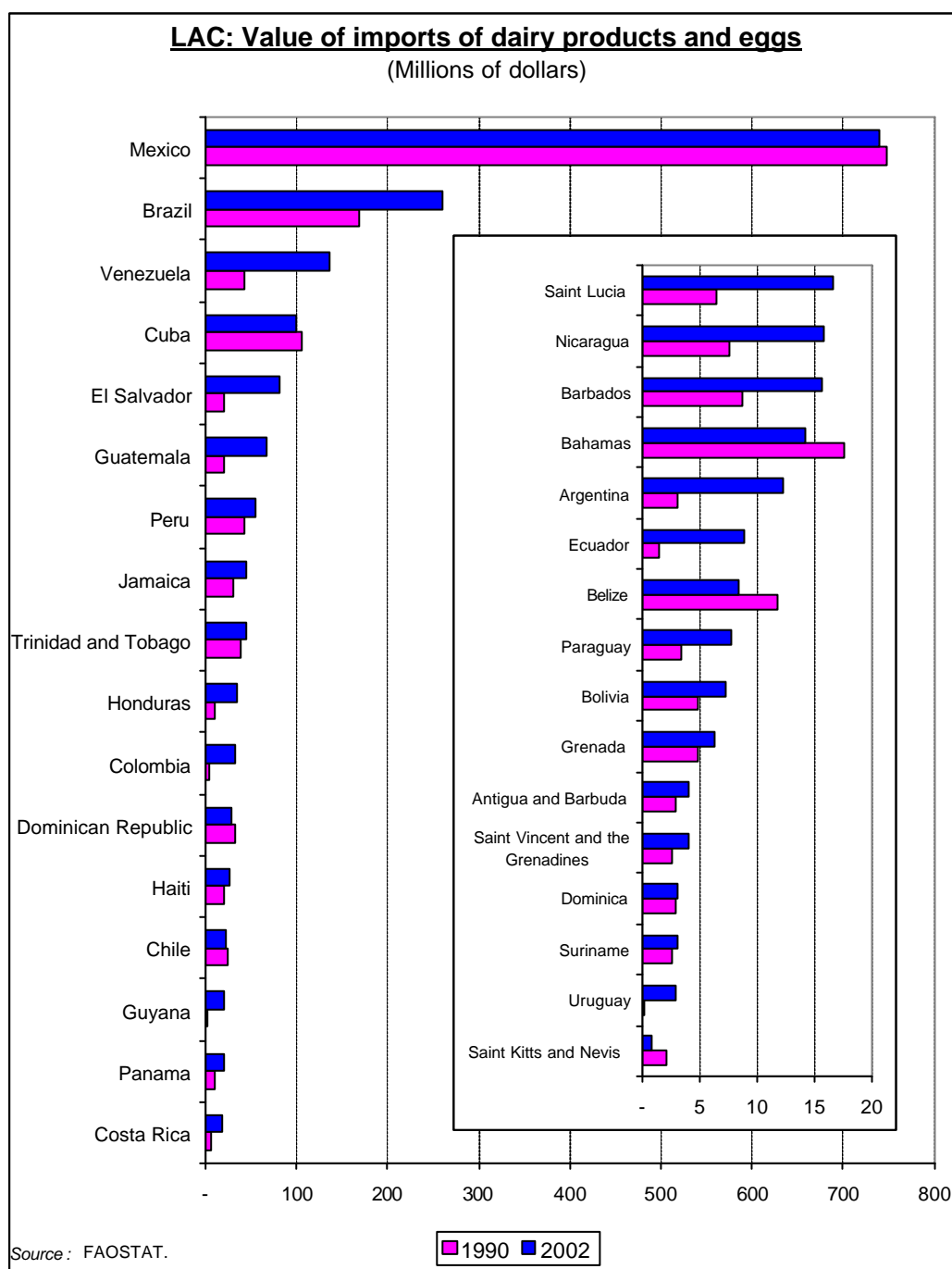
In 2002, nearly three quarters of the region's bovine meat imports went to Mexico (70%), while the remainder was widely distributed among the other countries. In relative terms, there were particularly large import shares in Chile (10%), El Salvador (3%), Bahamas (1%), Barbados (0.4%) and Jamaica (1%) (see figure 274).

Figure 274



Imports of dairy products were widely distributed throughout the region, with Mexico the leading importer (40%) partly because of the size of its economy. Large shares were also absorbed by Cuba (5%), El Salvador and Guatemala (4% each), Barbados and Bahamas (0.8% each), Guyana (1%) and Saint Lucia (0.9%) (see figure 275).

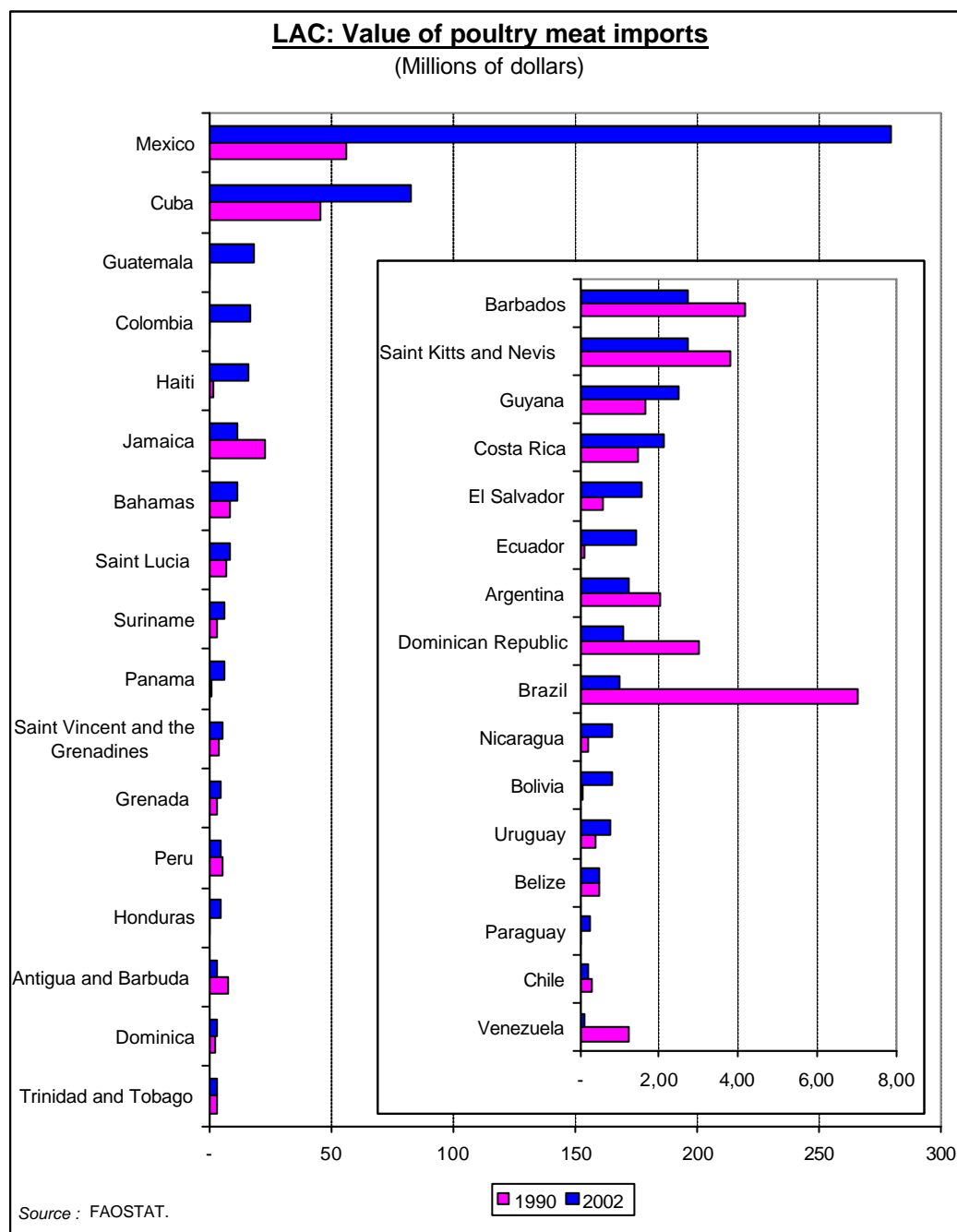
Figure 275





Over half of all poultry-meat imports in the region went to Mexico (55%). In relative terms, there were large-scale imports of chicken in Cuba (16%), Guatemala (4%), Bahamas (2%), Saint Lucia (1.6%), Grenada (1%) and Antigua and Barbuda (0.7%) (see figure 276).

Figure 276



Mexico was the region's leading importer of pig meat (72%), while imports to Cuba were also large in relative terms (5%).

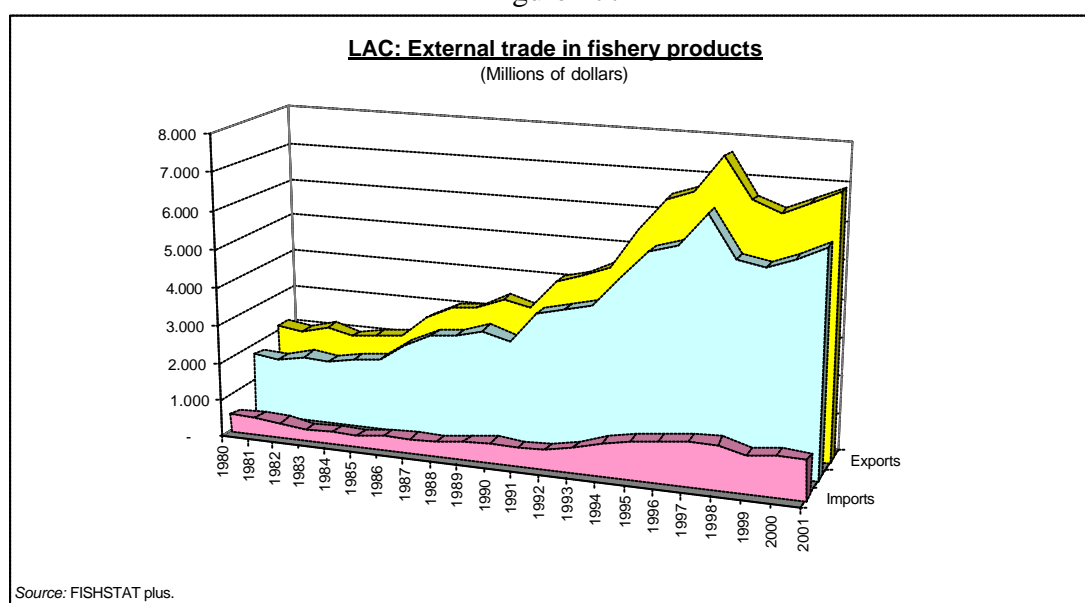
## D. INTERNATIONAL TRADE FISHERY PRODUCTS

International trade in fishery products is growing forcefully in Latin America and the Caribbean. In 2001, external sales of these products amounted to almost US\$ 7 billion, contributing 11% of total sectoral exports and 2% of the total value of goods exported by the region's countries. In several cases the share of fishery products in total merchandise exports was even larger: Panama (31%), Peru (16%), Ecuador (15%), Guyana (13%), Bahamas (11%) and Chile (11%).

On the other side of the equation, fishery imports are negligible in all countries. As a regional average, subsectoral imports accounted for just 0.3% of total goods imported in 2001, and 3% of sectoral imports. Fishery products represented 1% of total merchandise imports in four countries only (Barbados, Grenada, Saint Kitts and Nevis and Saint Lucia). Outside of the island states, the largest subsectoral share of total external purchases was in Colombia (0.6%).

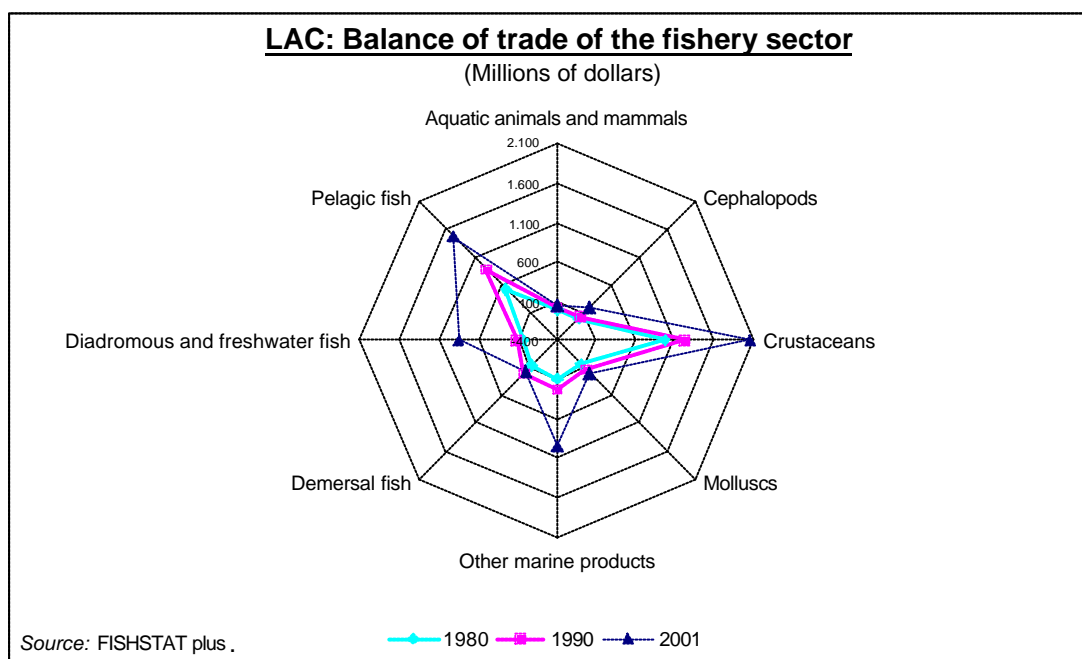
As a result, the fishery trade balance is large and growing, based almost entirely on the value of exports (see figure 277).

Figure 277



The most significant change in the composition of the regional surplus was caused by the development of salmon production in Chile starting in 1988. In the 1980s the structure of the region's trade surplus had been based on roughly the same components, mainly crustaceans (shrimp) and pelagic fish (canned and in the form of fish meal). During the 1990s the contribution to the trade surplus made by diadromous and freshwater fish (salmonidae) grew exceptionally strongly, as Chile's salmon trade surplus grew from US\$ 7 million to US\$ 940 million between 1987 and 2001. At the same time, the regional trade surplus in crustaceans, pelagic fish and other marine products also expanded. Consequently, the regional trade surplus in fishery products as a whole widened from US\$ 2.8 billion in 1990 to US\$ 5.9 billion in 2001 (see figure 278).

Figure 278



Partly due to the low level of consumption per capita, the region has a surplus in all product categories. In 2001, the main components of the subsectoral trade surplus continued to be crustaceans and pelagic fish (34% and 25%, respectively), with diadromous fish accounting for another 14% (see table 57).

Table 57

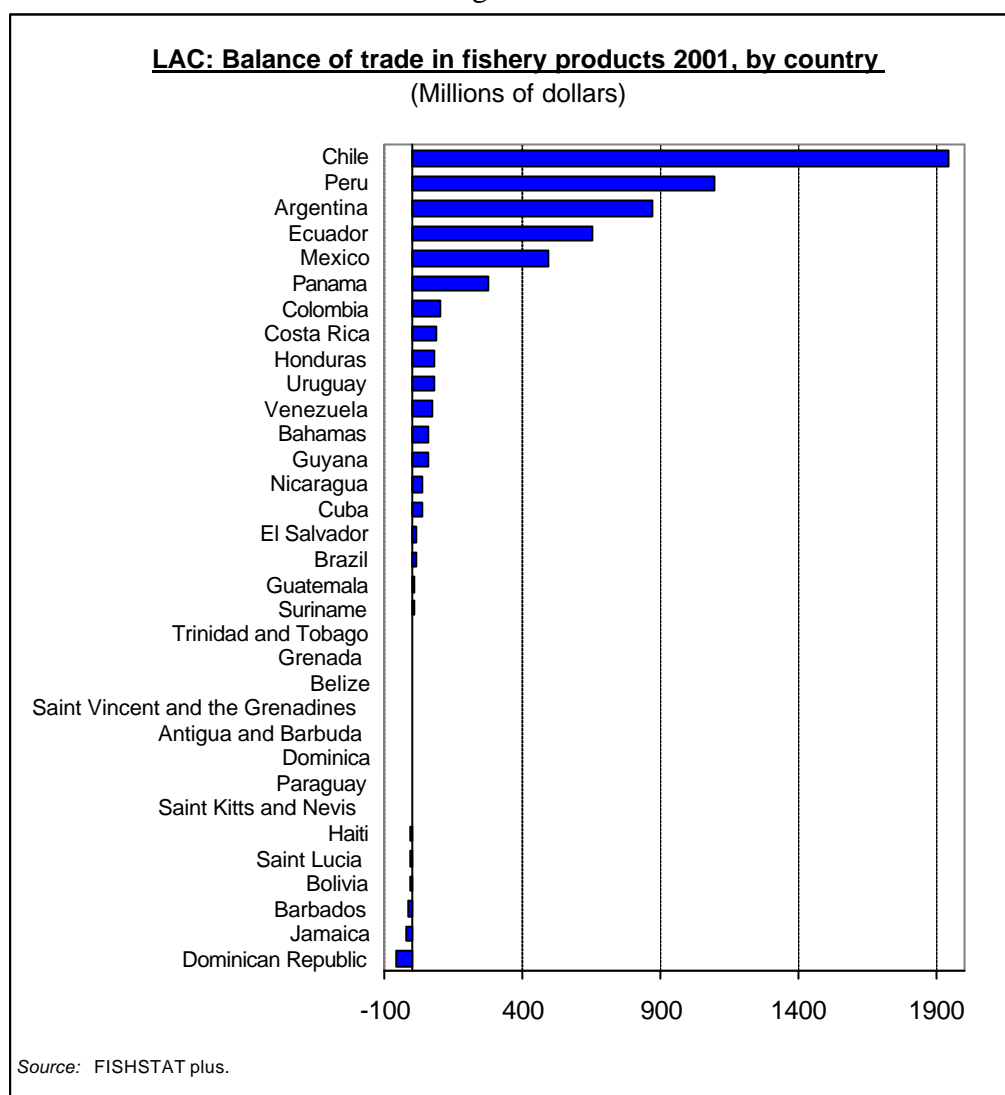
LAC: External trade in fishery products							
Product	(Thousands of dollars)		Trade balance (Thousands of dollars)	Share (%)		Growth rate (1990-2001)	
	Exports	Imports		X	M	Exports	Imports
<b>TOTAL</b>	<b>6,949,300</b>	<b>1,033,888</b>	<b>5,915,412</b>	<b>100.0</b>	<b>100.0</b>	<b>6.40</b>	<b>8.49</b>
<i>Pelagic fish</i>	1,785,080	329,442	1,455,638	25.7	31.9	3.92	8.04
<i>Demersal fish</i>	309,492	152,784	156,708	4.5	14.8	1.13	6.16
<i>Diadromous and freshwater fish</i>	969,115	126,173	842,942	13.9	12.2	17.63	31.93
<i>Crustaceans</i>	2,119,555	75,743	2,043,812	30.5	7.3	4.80	13.66
<i>Cephalopods</i>	220,292	27,492	192,800	3.2	2.7	13.91	16.72
<i>Molluscs</i>	219,192	29,949	189,243	3.2	2.9	7.27	13.49
<i>Aquatic animals and mammals</i>	44,398	1,220	43,178	0.6	0.1	-1.66	8.88
<i>Seaweed</i>	69,667	10,670	58,997	1.0	1.0	13.81	15.50
<i>Other marine products</i>	1,212,509	280,415	932,094	17.4	27.1	8.62	5.18

Source: FAORLC based on FAOSTAT data.

Chile produces the leading share of the fishery trade surplus, mainly as result of its remarkable development of salmon farming, but also reflecting surpluses in pelagic fish, molluscs, marine animals and seaweed. Peru also has a large share, based essentially on its trade surplus in pelagic fish (60% of the regional surplus in this category). The surplus in Argentina is based on crustaceans, demersal fish and cephalopods (octopus and squid); whereas that in Ecuador is largely the outcome of sales of canned crustaceans and pelagic fish.

Many of the island states display trade deficits in fishery products, thereby revealing demand that is not satisfied by domestic supply in a productive sector of particular importance given the situation of these countries (see figure 279).

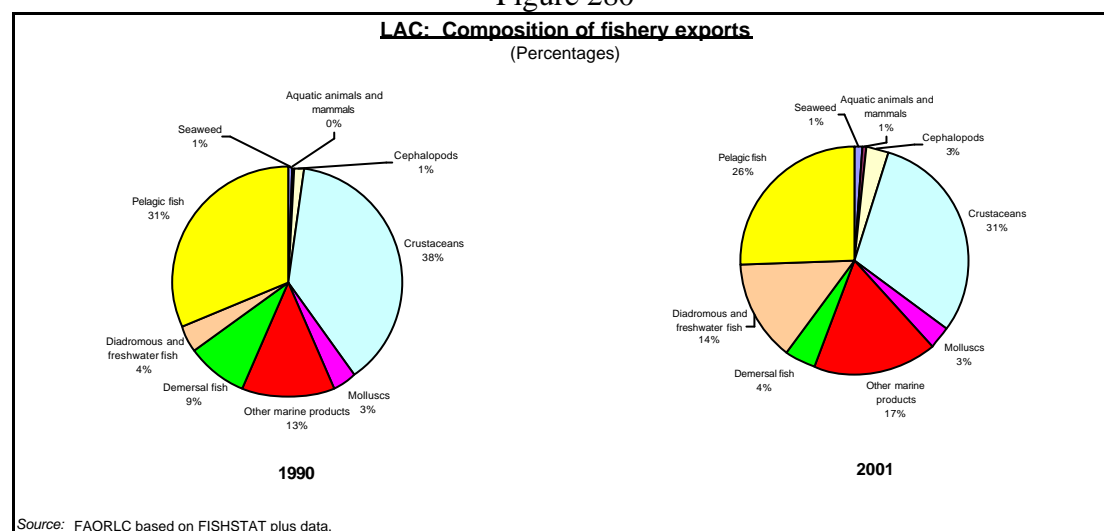
Figure 279



(i) *Exports*

Fishery exports have maintained their pace of growth during the two decades; expanding by 6.0% per year in the 1980s, and by 6.4% in the 1990s. Nonetheless, there have been significant changes in the composition of exports. Until 1990, 69% of external sales corresponded to the two traditionally important groups in the region's fishery exports, namely crustaceans and pelagic fish (basically fish meal). By 2001, in contrast, those two groups accounted for just 57%, while diadromous fish represented 14% of the total (see figure 280).

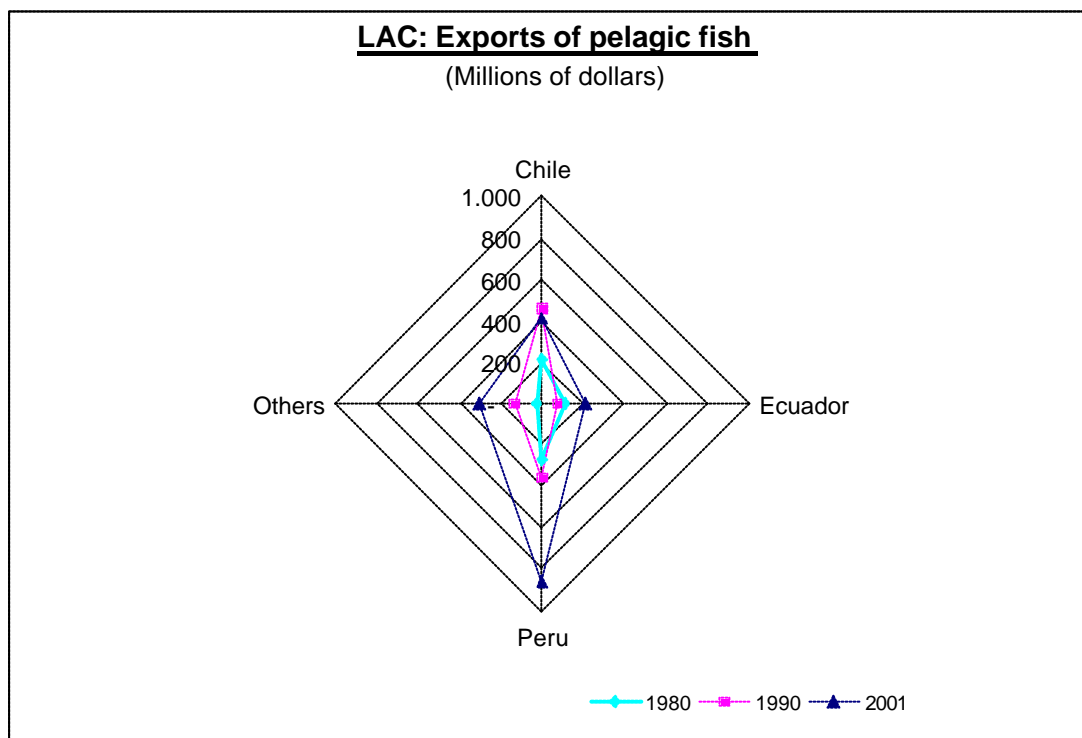
Figure 280



The growth of salmon exports has been the most important change in the region during the period. In 1997, US\$ 15 billion worth of diadromous and freshwater fish were exported; by 2001, the figure had risen to US\$ 970 billion. Practically all of this increase corresponded to salmon exports from Chile (US\$ 937 million).

Exports in the pelagic fish category were concentrated mainly in Peru and Chile (essentially fish meal). During the 1980s, these exports grew rapidly in both countries, especially in Chile; over the last decade, Chilean exports of pelagic fish stabilized, while the category grew exponentially in Peru (see figure 281).

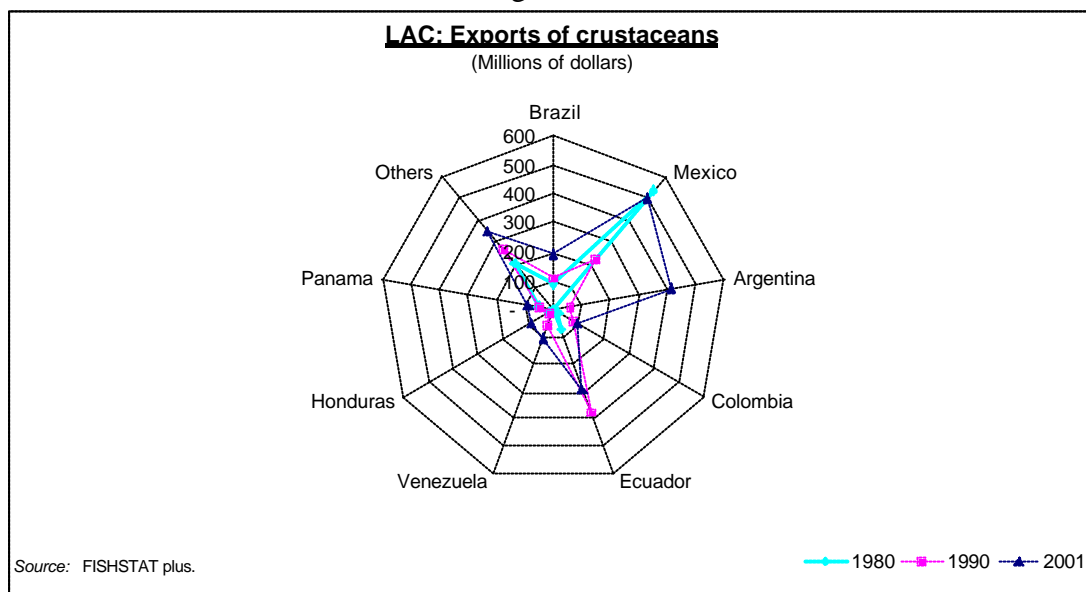
Figure 281



Source: FISHSTAT plus.

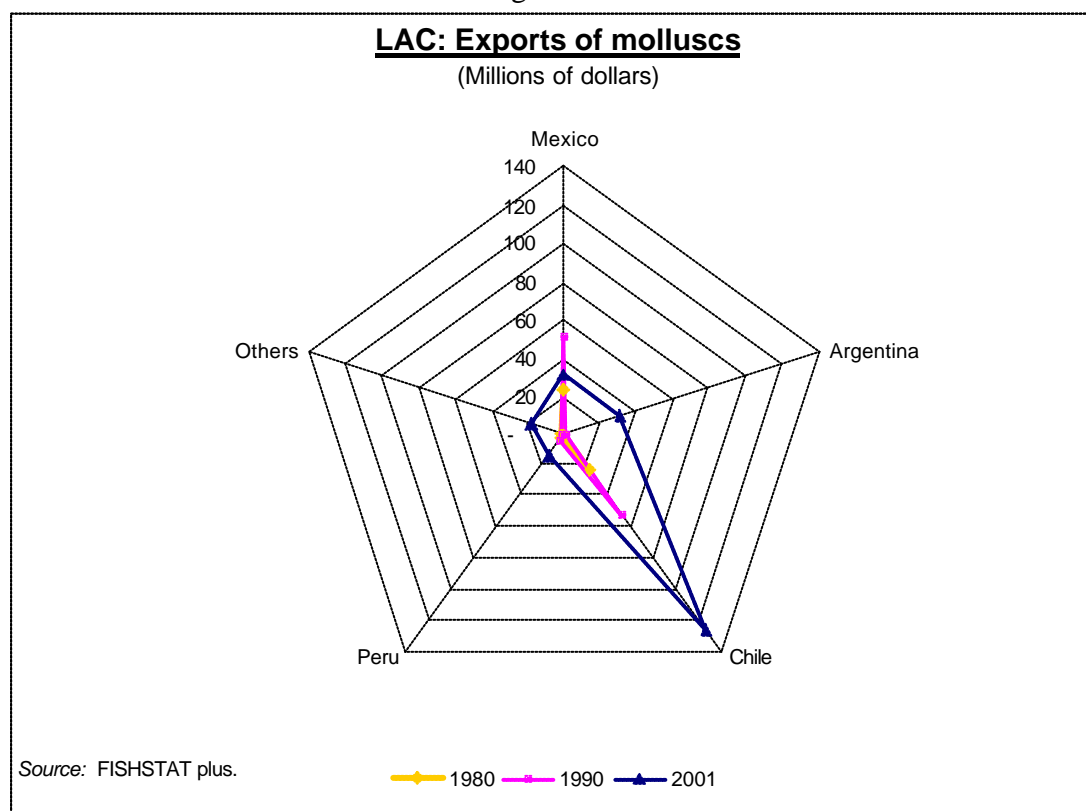
During the 1980s, crustacean exports had grown rapidly in Ecuador; but serious problems with diseases that attacked shrimp farming in that country halted export growth, and external sales had even declined by 2001. In contrast, there were exceptionally large increases in Argentina and Mexico, which regained their 1980 levels, but on a different base (see figure 282).

Figure 282



The geographic distribution of mollusc exports also changed dramatically during the last decade, growing strongly in Chile and, to a lesser extent, in Argentina and Peru. Mollusc exports in Mexico declined, however (see figure 283).

Figure 283

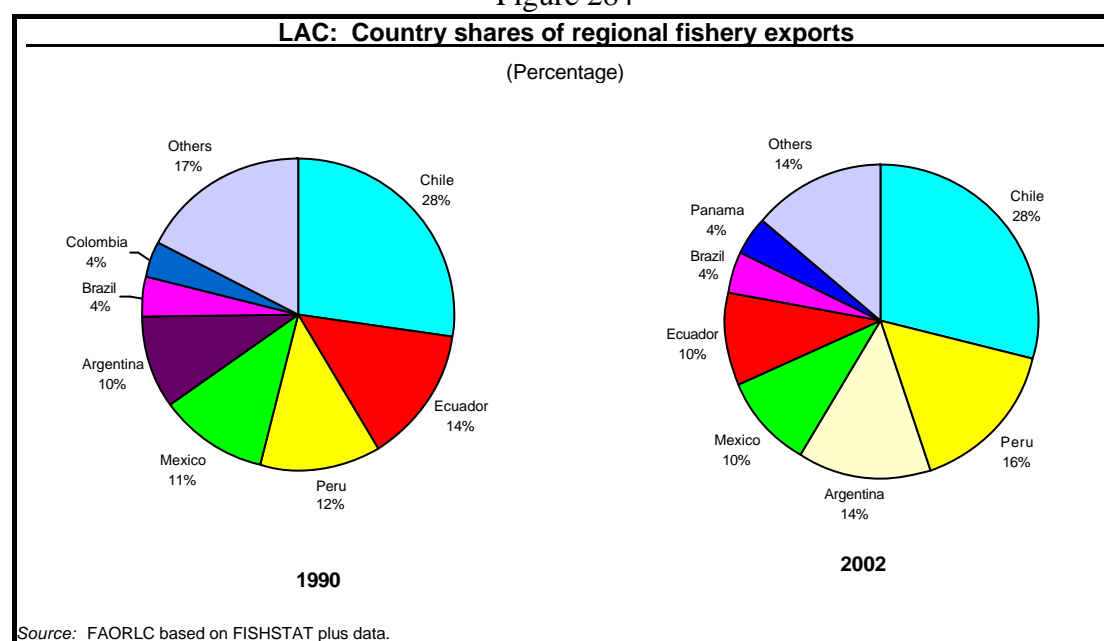


There was also significant growth in cephalopod exports. In 1990, external sales in this category amounted to US\$ 43 million, and by 2001 the figure had reached US\$ 220 million, most of which (US\$ 149 million) represented exports from Argentina.

### *Country shares in fishery exports*

Despite significant changes in the composition of exports, the different countries have seen only minor changes in their regional shares. The change in the structure of fishery exports from Chile did not cause a major change in this country's share of total regional exports (see figure 284).

Figure 284

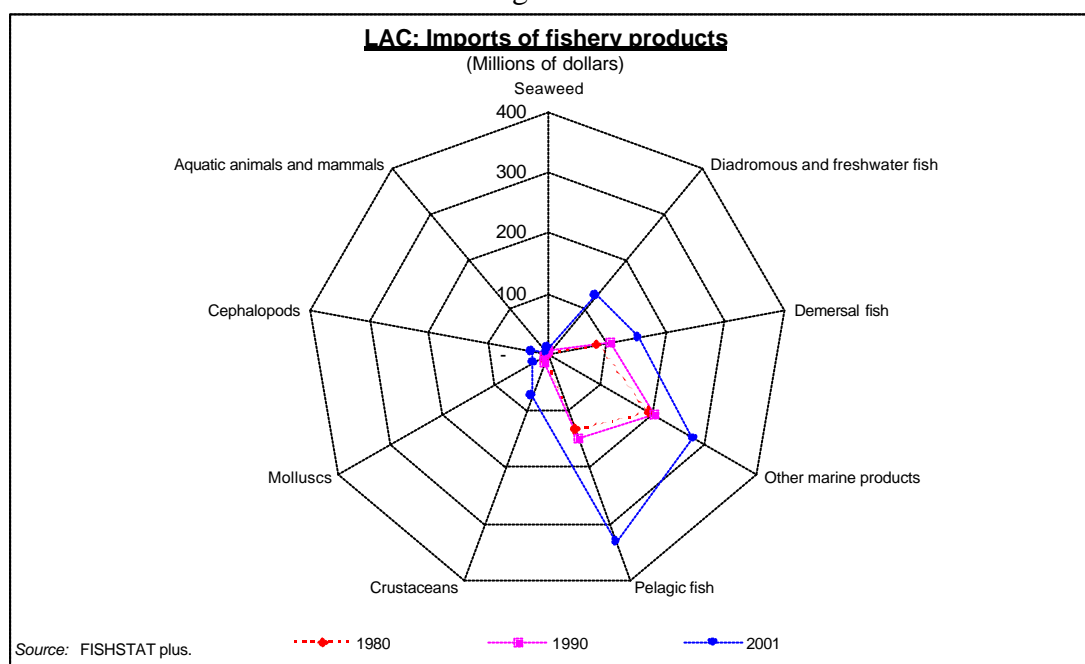


### *(ii) Imports*

In Latin America and the Caribbean, fishery imports essentially correspond to intra-regional trade flows, generally involving small amounts. Until 1992, annual import values were below US\$ 500 million, but by 2001 they had risen to US\$ 1 billion. The increase occurred in the three categories that were already relatively important, namely pelagic fish (mostly canned and fish meal), demersal fish (hake or similar), and “other products” (mainly frozen or canned fish); and also among the diadromous fish category, especially reflecting intra-regional trade in Chilean salmon (see figure 285).



Figure 285



## E. FORESTRY PRODUCTS

### (i) Balance of trade in forestry products

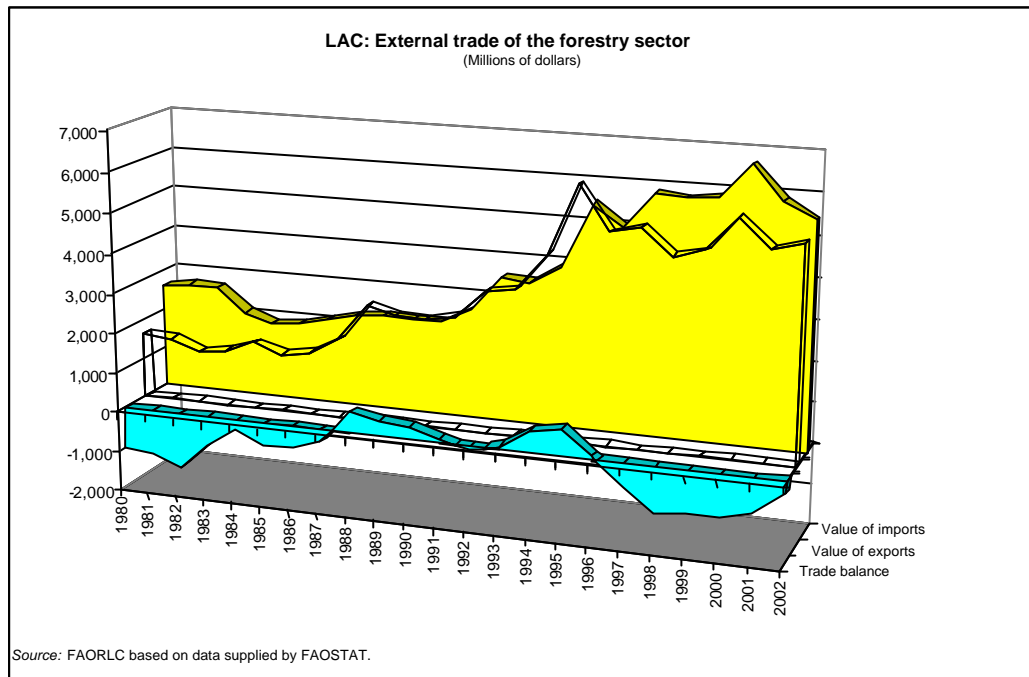
In 2002, forestry exports from Latin America and the Caribbean accounted for 8% of exports in the broad agricultural sector and 1.5% of total goods exported. Imports represented 17% of the sectoral total, and 1.6% of total merchandise imports. From 1998 to 2002, exports have stabilized at just over US\$ 5 billion, and imports at around US\$ 6 billion, thereby generating a deficit of roughly US\$ 1 billion per year.<sup>40</sup>

The figures for international trade in forestry products have a small weight in the regional average; but their relative importance is greater in some countries. In Chile, forestry products account for about 8% of external sales, in Uruguay and Guyana about 6%, and in Brazil 5%.

During the 1980s, forestry exports grew by an average of 7.3% per year, especially driven by Brazilian exports of manufactured products (pulp and fibres, paper and paperboard), while Chilean exports also grew in smaller amounts. During that decade, characterized by economic recession and shrinking domestic demand across most of the region, imports did not grow at all, and even declined (-1.2% annually), such that the initial deficit of US\$ 1 billion was steadily absorbed and by the end of the decade there was a surplus of US\$ 300 million. During the 1990s, imports expanded more strongly, by 7.6% per year, driven mainly by an increase in Mexican paper imports. In addition, the pace of export growth eased to 5.1% per year, following a slowdown in sales from Brazil and Chile especially after 1995. Consequently, the balance declined again and, as mentioned above, the region has posted an annual deficit of around US\$ 1 billion since 1998 (see figure 286).

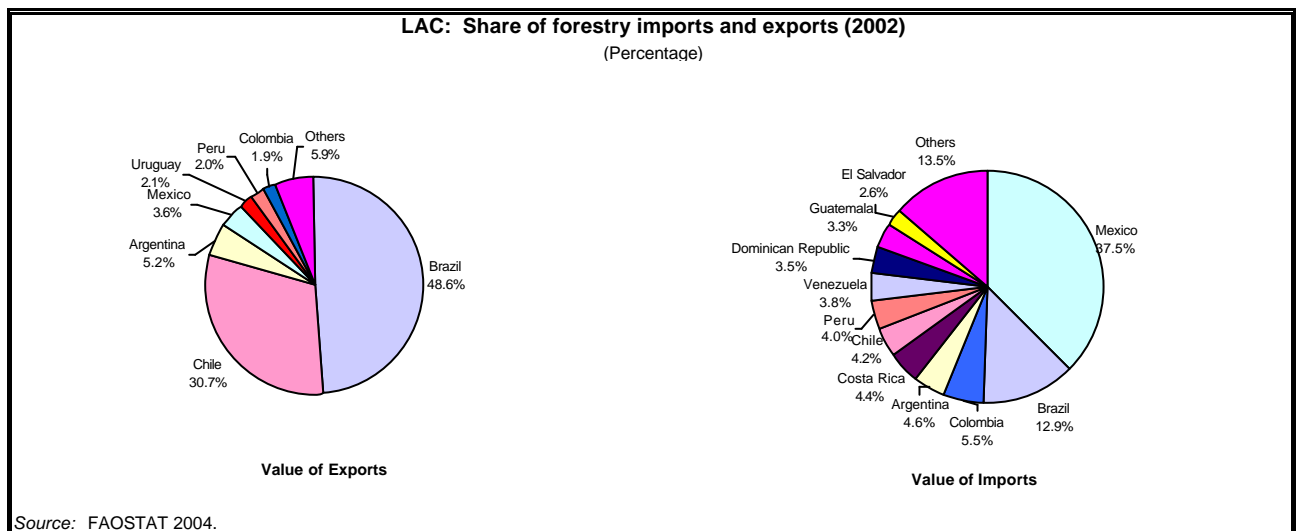
<sup>40</sup> Exports of forestry products are estimated at over US\$ 7 billion in 2003.

Figure 286



As much as 80% of the region's forestry exports originate in Brazil and Chile (49% and 31%, respectively). Imports are more widely distributed, however; Mexico is the leading importer, accounting for 30% of the total (see figure 287).

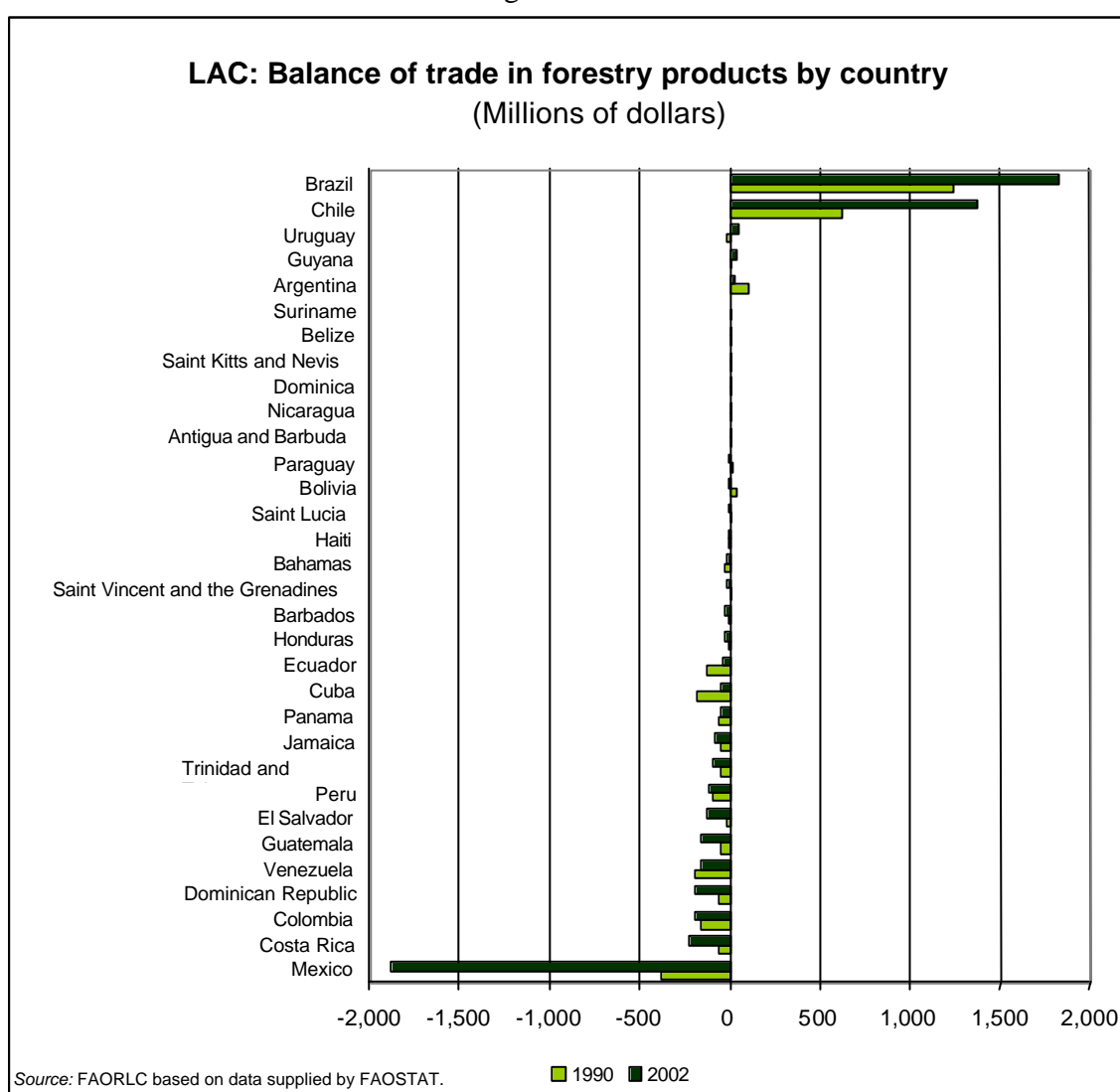
Figure 287



The trade balance is concentrated in a few of the region's countries, with most of the surplus generated by Brazil and Chile, although Uruguay and Guyana also show significant national surpluses. The deficit is concentrated in Mexico in absolute terms; but is also relatively large in Saint Kitts and Nevis, and Saint Vincent and the Grenadines, as well as in Central American countries except Nicaragua.

The overwhelming majority of the region's countries run trade deficits in forestry products; but at the regional level these are compensated by the surpluses generated by Brazil and Chile. Chile runs a surplus in all categories, while Brazil compensates for its deficit in newsprint with a surplus in the other forestry product categories. This country is also the world's largest producer and exporter of short-fibre paper, which is manufactured from eucalyptus. There are also four countries that are almost in balance or have small surpluses in their forestry-product trade, albeit involving much smaller figures than those of Brazil or Chile: Uruguay, Guyana, Argentina and Suriname (see figure 288).

Figure 288



As exports are very small in Central America and the Caribbean, import trends control the level of the deficit, which represents significant proportions of overall merchandise imports in both of these subregions. External purchases of forestry products in Central America accounted for 2.8% of total merchandise imports in 2002, 1.9% in the Latin Caribbean and in 2.2% CARICOM (see figures 289, 290 and 291).

Figure 289

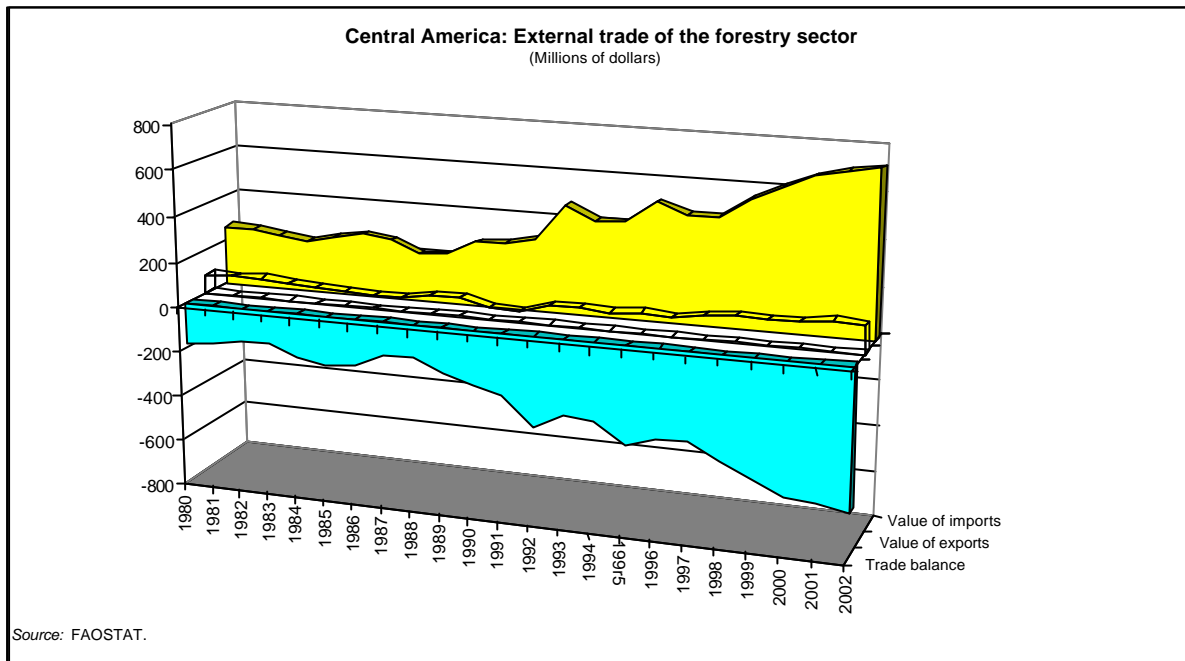


Figure 290

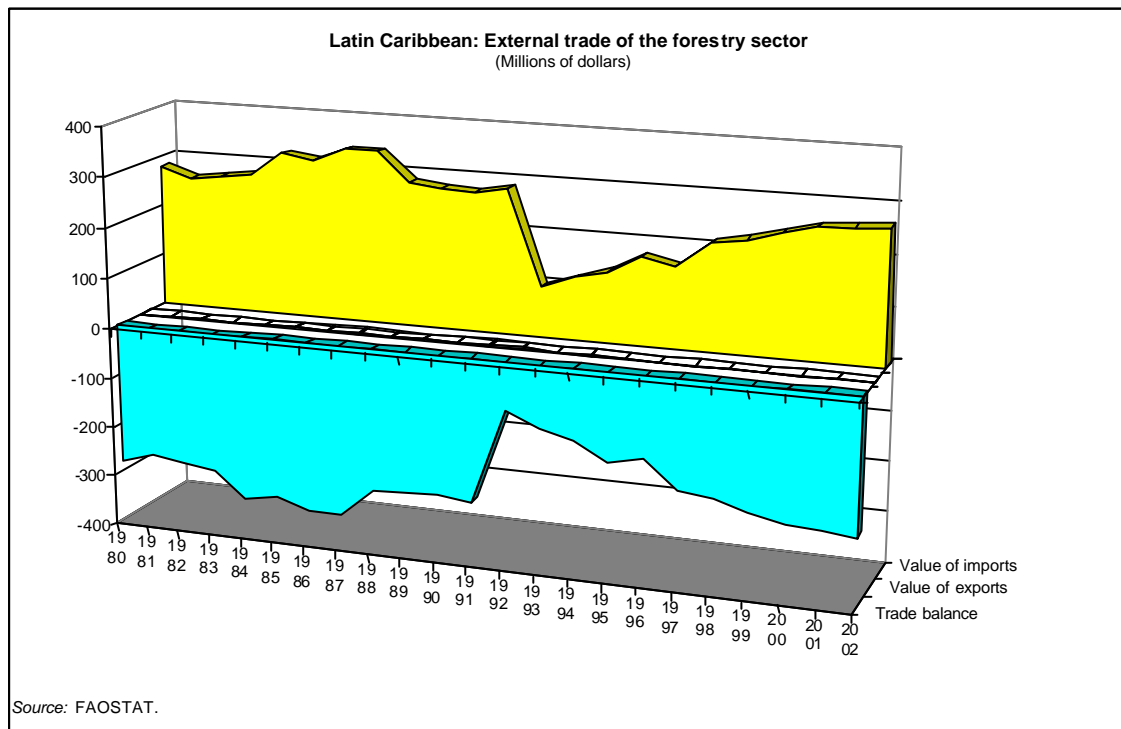
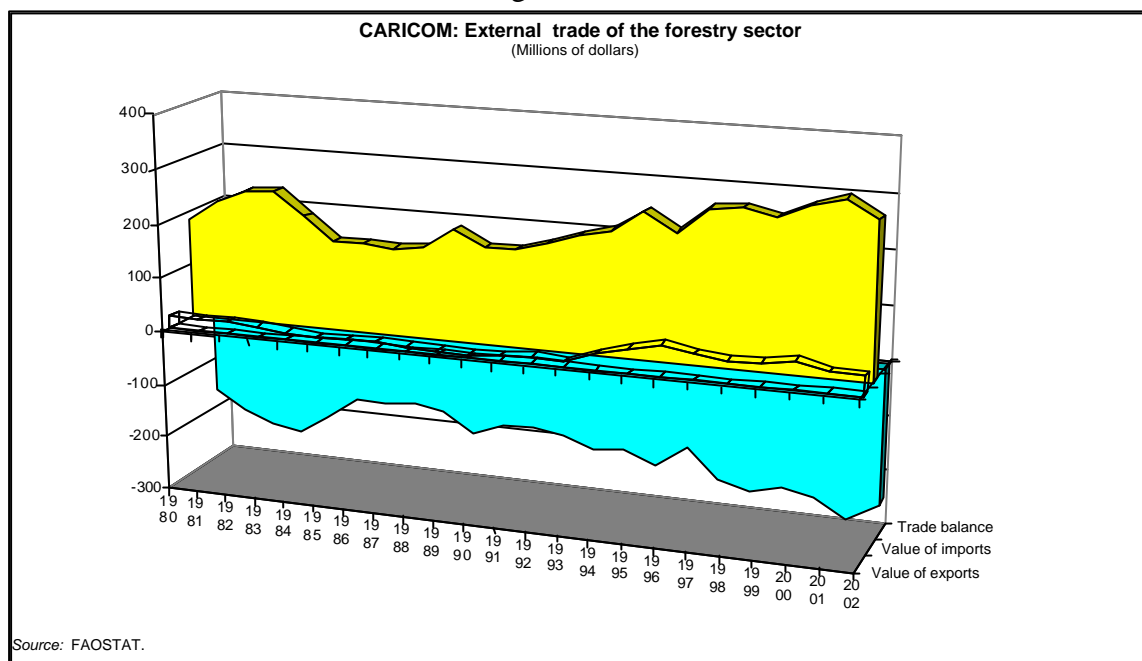


Figure 291



The region's relatively small trade balance stems from a deficit in paper and paperboard which more than cancels out the surplus in all the other categories, in both primary and processed products (see table 58).

Table 58

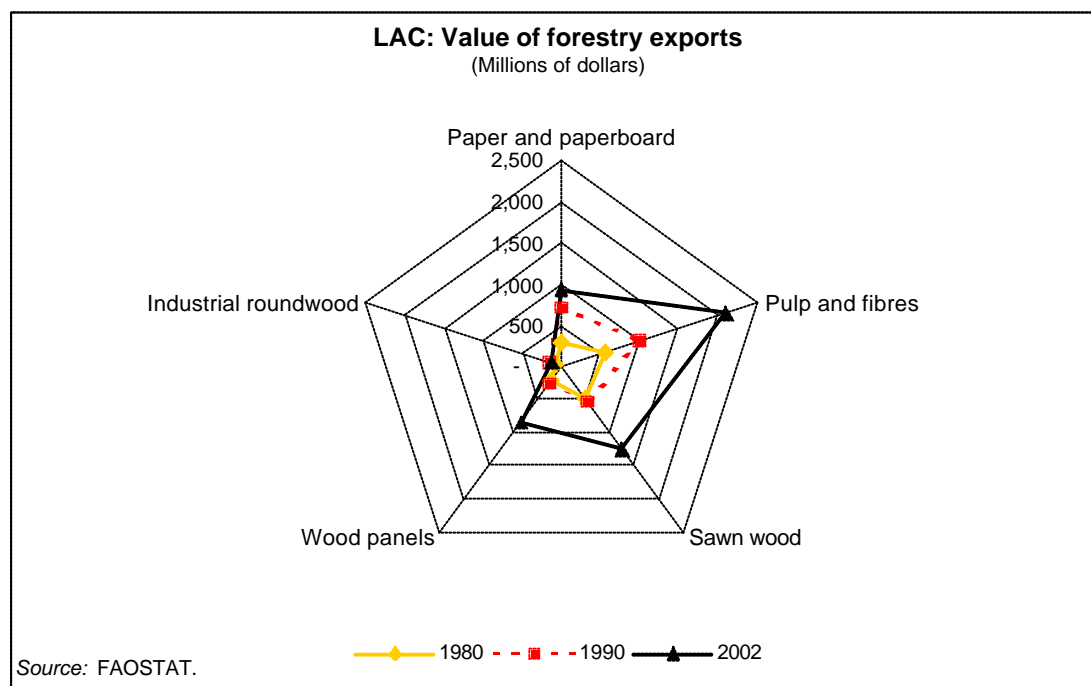
External trade in forestry products (2002)							
Category	Thousands of dollars			Share (%)		Growth rate (1990-2002)	
	Exports	Imports	Trade balance	Exports	Imports	Exports	Imports
<b>Latin America and the Caribbean</b>	<b>5,222,729</b>	<b>5,506,120</b>	<b>-283,391</b>	<b>100.0</b>	<b>100.00</b>	<b>5.10</b>	<b>7.64</b>
<i>Paper and paperboard</i>	933,182	3,728,864	-2,795,682	17.9	67.72	0.9	8.5
<i>Pulp and fibres</i>	2,096,874	739,809	1,357,065	40.1	13.44	7.1	4.3
<i>Sawn wood</i>	1,233,790	529,748	704,042	23.6	9.62	6.2	4.6
<i>Wood panels</i>	837,267	487,680	349,587	16.0	8.86	-2.5	5.0
<i>Industrial roundwood</i>	121,616	20,019	101,597	2.3	0.36	8.4	11.7

Source: FAOSTAT 2004.

(ii) *Exports*

During the 1980s, the main categories exported were pulps and fibres, paper and paperboard, and sawn wood; since the last decade these categories have been joined by exports of wood-based panels (see figure 292).

Figure 292



Only exports of manufactured products (pulp and fibres, and paper and paperboard), grew in the 1980s, mainly reflecting the buoyancy of paper exports from Brazil; foreign sales of pulp and fibre expanded in this country and in Chile.

During the 1990s, pulps and fibres were the most dynamic category, mainly in Chile (where exports in this category now almost match those of Brazil), and the two countries account for practically all of the regional total.

The 1990s also saw the start of a prosperous export process in non-timber forestry products, estimated at over US\$ 250 million for 2002, mainly in Brazil, Peru, Bolivia and Argentina.

Exports of paper and paperboard less strongly, mainly because Brazilian sales slumped by nearly half. This reduction was partly offset by a stronger export performance in other countries – Chile particularly, but also Mexico and Colombia.

Most of the increase in exports of wood-based panels was generated by Brazil; Chilean exports in this category grew rapidly, but from a small initial base.

In the sawn wood category, apart from those originating in Brazil and Chile, there were significant exports from Honduras, Mexico, Argentina and other countries.

### *Geographic distribution of forestry exports*

Forestry exports in Latin America and the Caribbean are heavily concentrated in Brazil and Chile. In recent years other countries have recorded export growth in different products, albeit on a smaller scale. External sales of paper and paperboard increased in Mexico, Colombia, Argentina and Uruguay; foreign sales of wood panels were also significant in Argentina and Peru; as were sawn wood exports in Peru, Argentina, Honduras and Mexico. Nonetheless, export growth in Brazil and Chile has been much more dynamic, and regional exports in this subsector are continuing to concentrate in these two countries (see figures 293, 294, 295, 296 and 297).

Figure 293

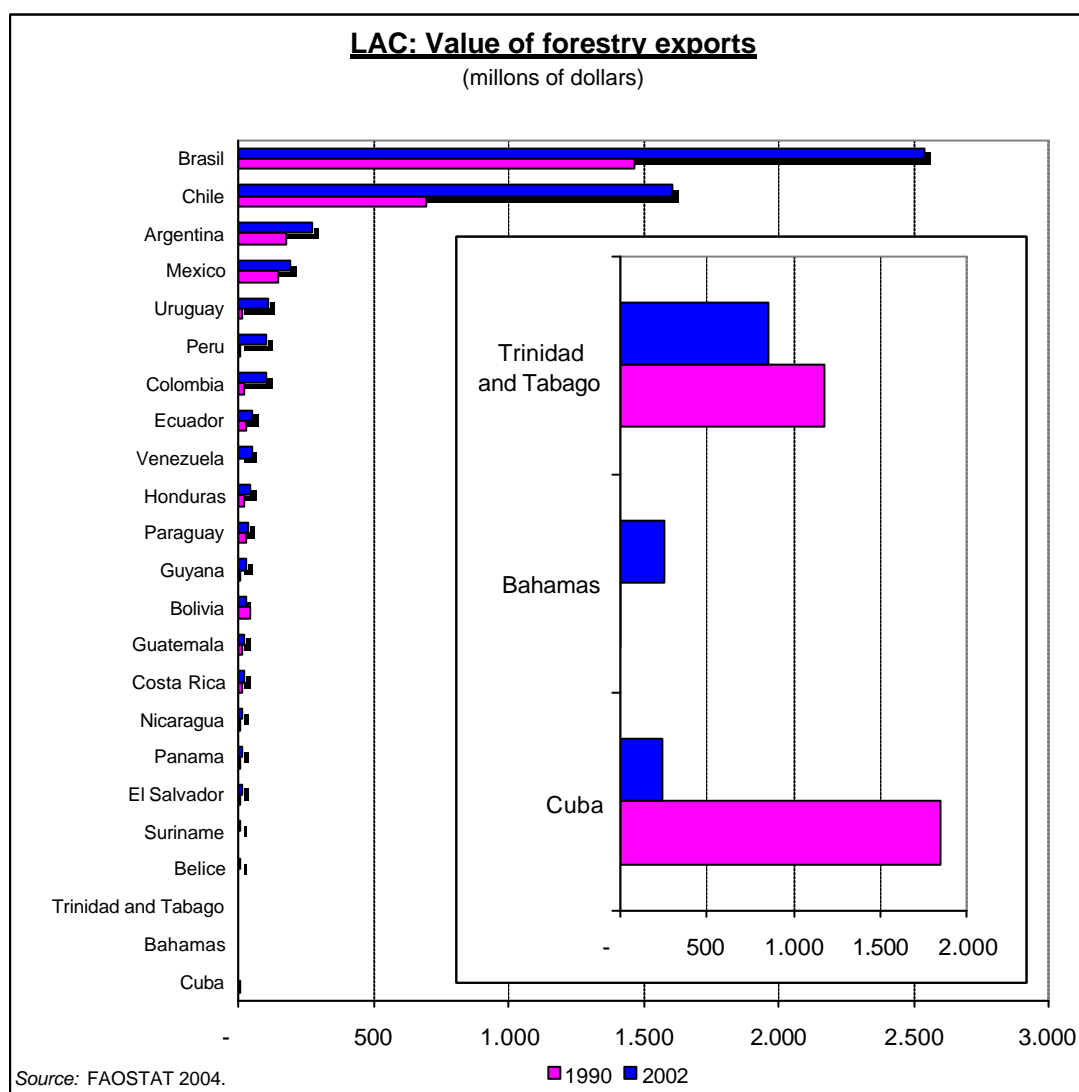


Figure 294

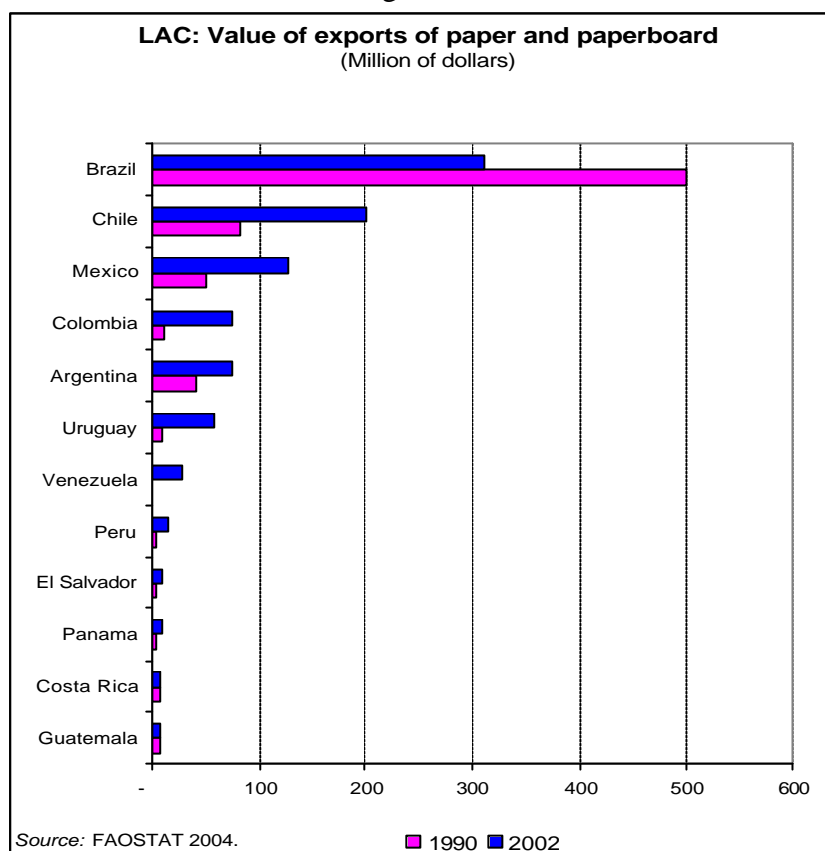


Figure 295

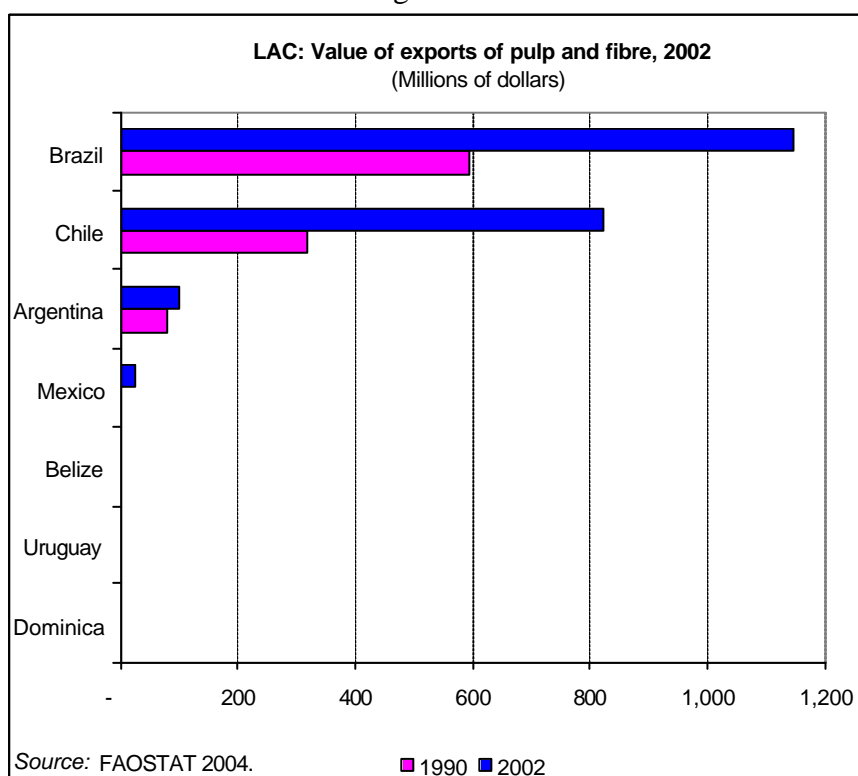




Figure 296

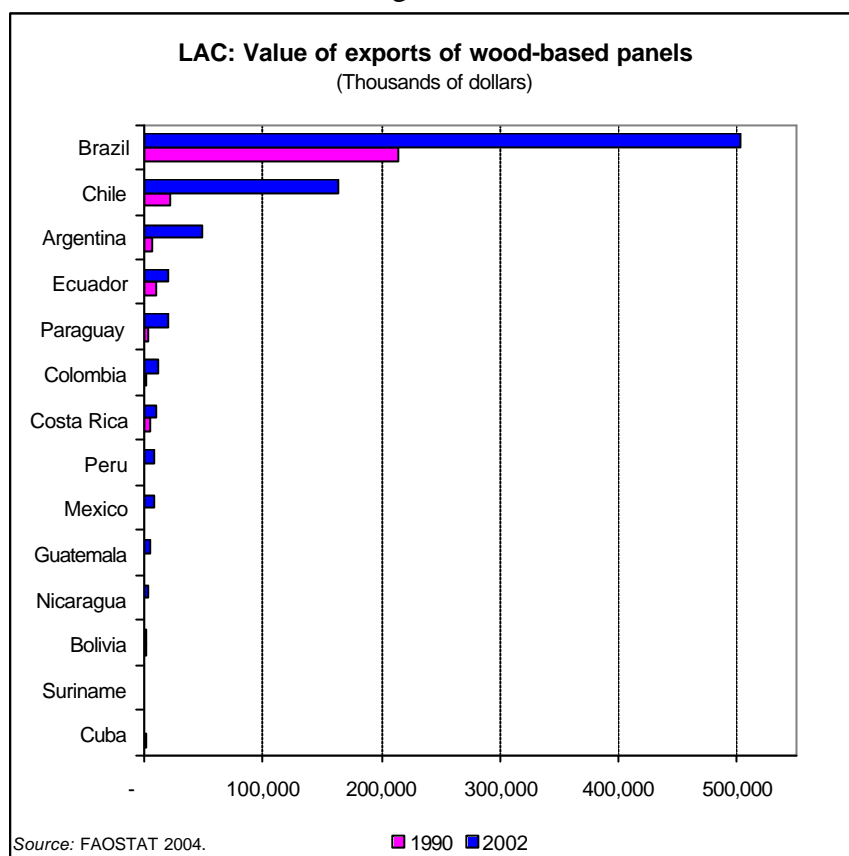
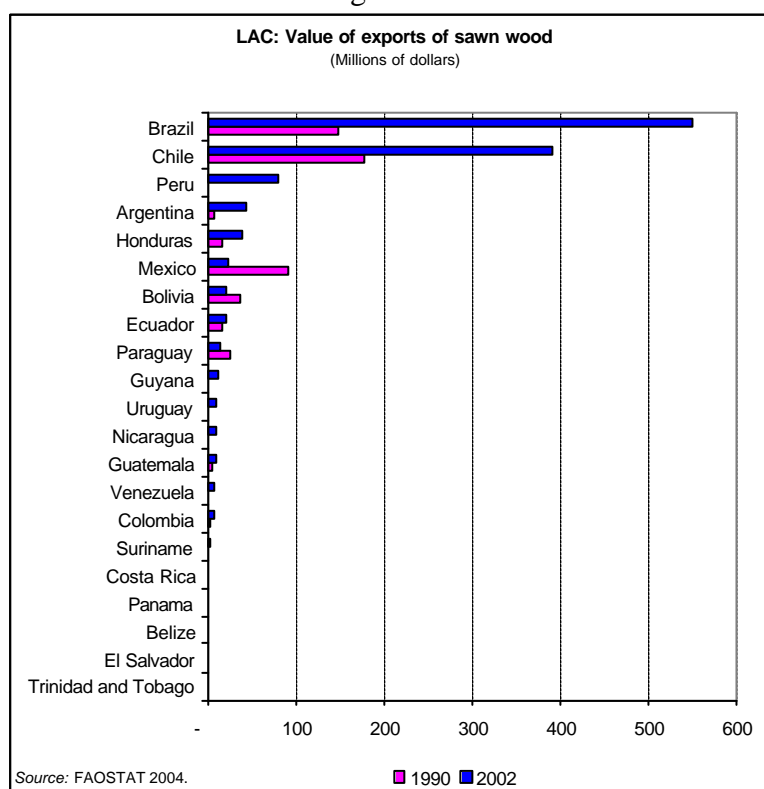


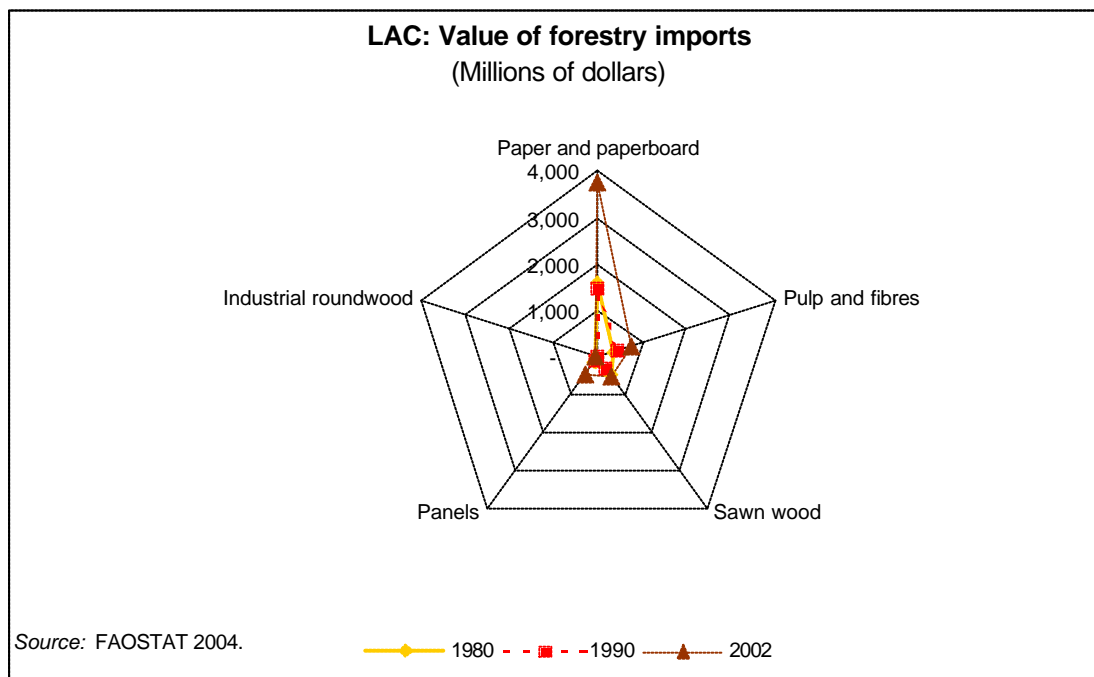
Figure 297



(iii) *Imports*

In the 1980s forestry imports stabilized at around US\$ 2 billion, in the midst of a contraction in domestic demand throughout Latin America and the Caribbean stemming from the external debt crisis and ensuing adjustment programmes. During the 1990s, on the other hand, forestry imports grew vigorously (7.6%), thanks especially to increased paper imports in Mexico, Brazil, Argentina, Chile, Peru, Dominican Republic and the Central American countries (see figure 298).

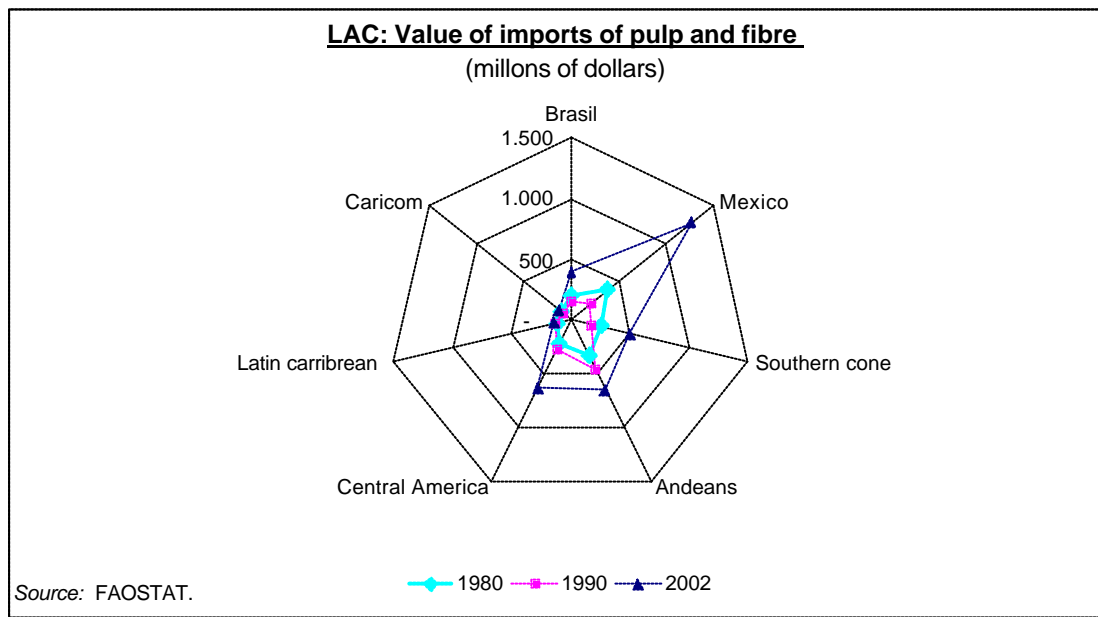
Figure 298



Having hardly grown at all in the 1980s (0.9% per year), imports of paper and paperboard expanded by 14% in 1991 and by a further 32% in 1992; after which they maintained strong growth until 1997 before stabilizing, thereby demonstrating a high income-elasticity of demand.

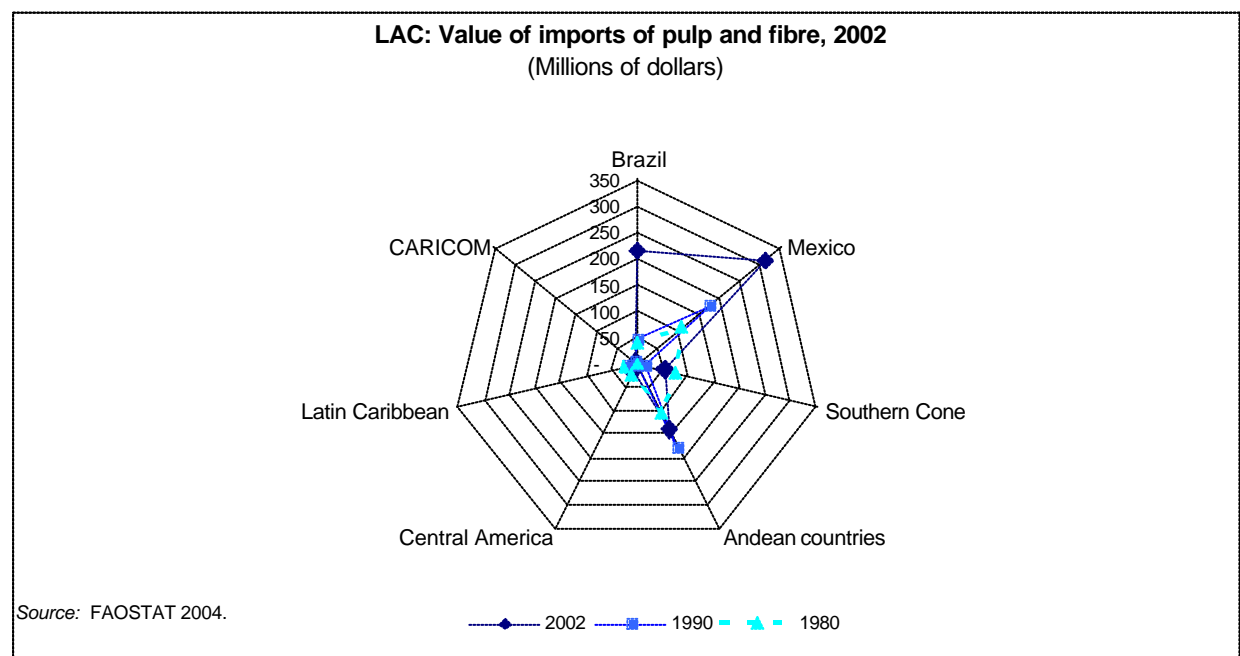
Although the growth in paper imports was quite widespread in the region, it was mostly concentrated in Mexico and in Central America (see figure 299).

Figure 299



Imports of the other processed product, pulp and fibres, were smaller in amount and concentrated exclusively in Mexico. During the 1990s, the latter’s imports in this category increased, as did those of Brazil, Colombia and Venezuela (see figure 300).

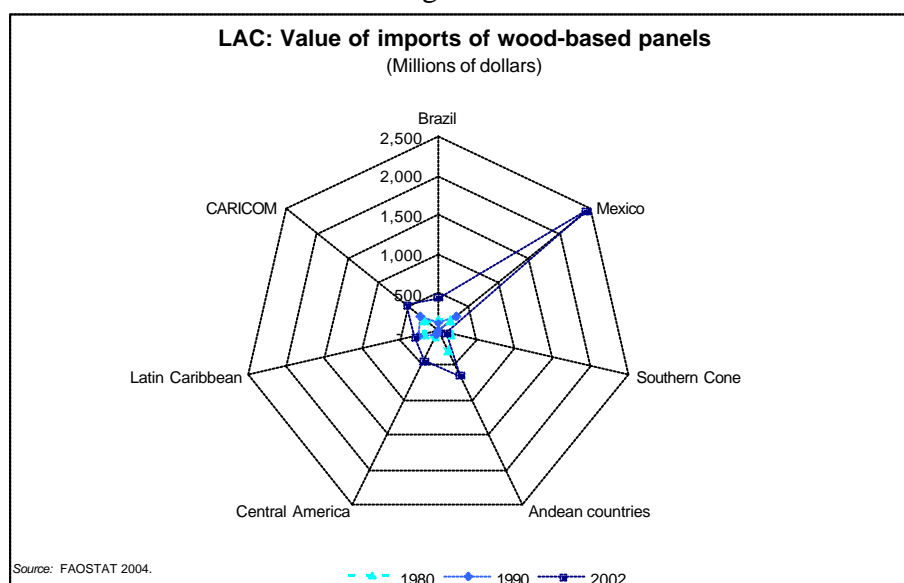
Figure 300



Imports of primary forest products are relatively insignificant. Purchases of wood panels grew rapidly in Mexico as from 1999, and since then have accounted for half

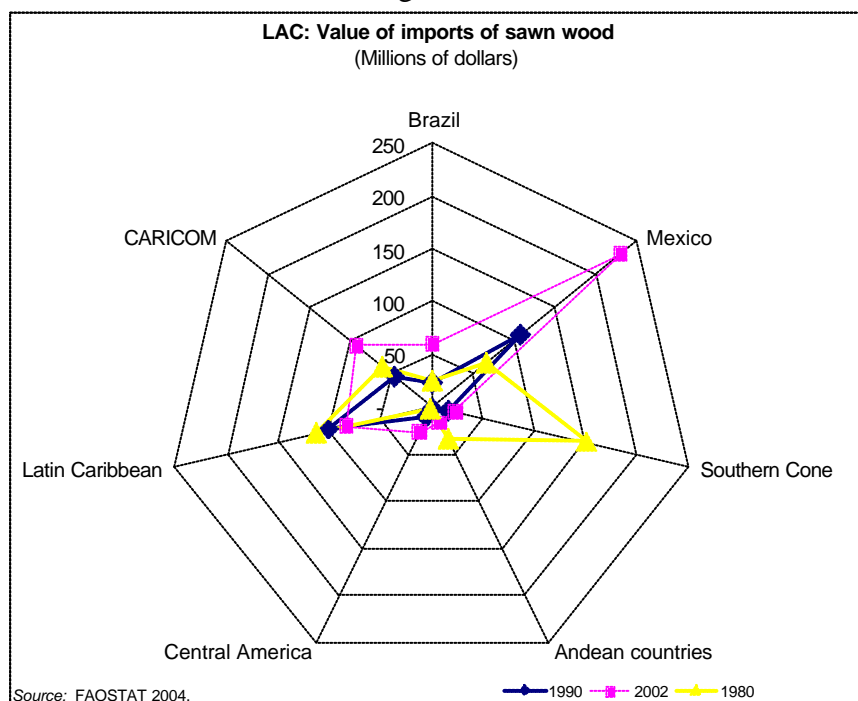
of the region's total imports in this category, which expanded at annual rate of 5% during the last decade (see figure 301).

Figure 301



The other category in which regional imports achieved significant levels is sawn wood, having grown by 4.6% per year over the last decade, boosted particularly by higher imports in Mexico, Jamaica and the Bahamas (see figure 302).

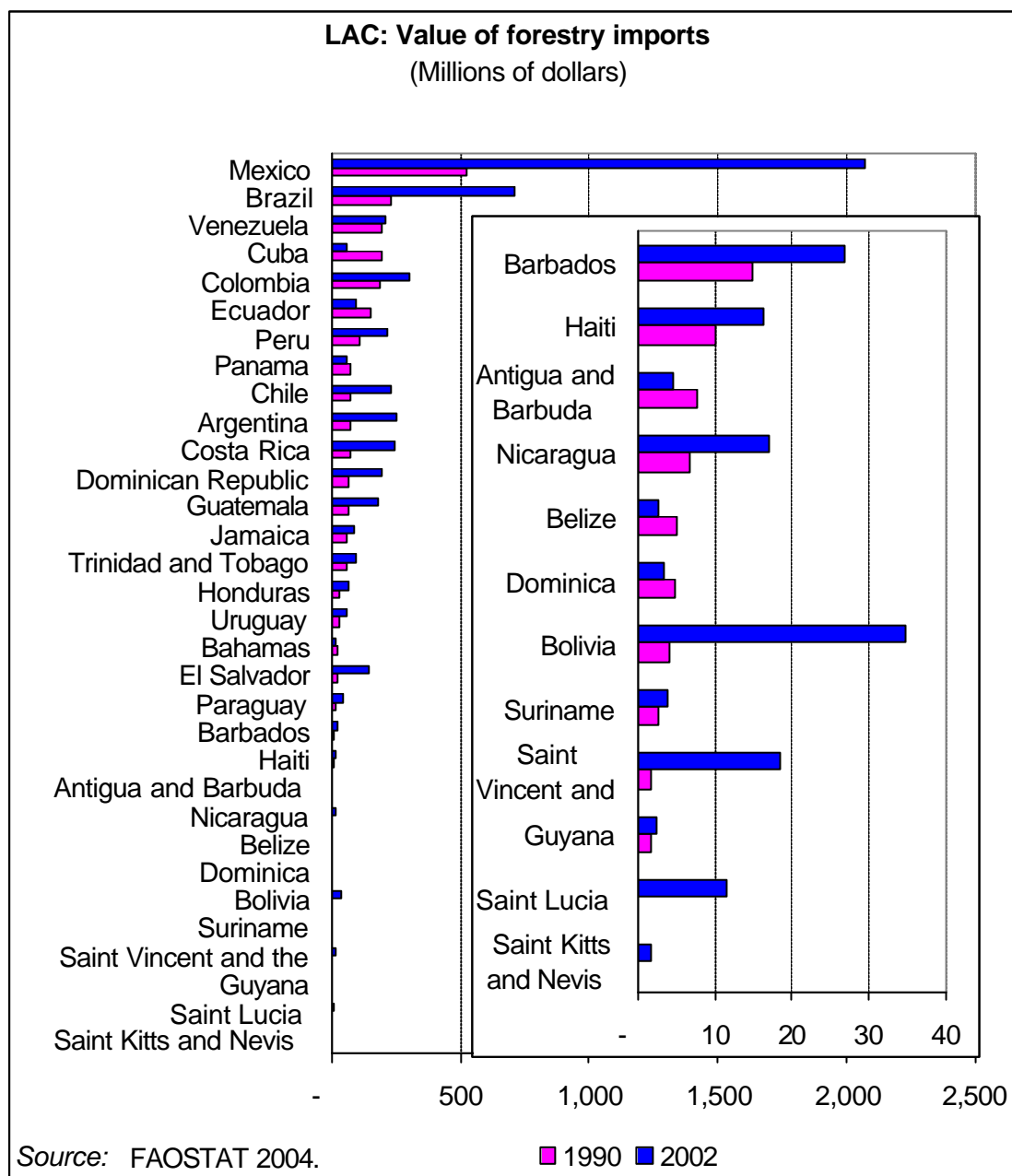
Figure 302



*Geographic distribution of forestry-product imports*

External purchases by the leading importer of forestry products, Mexico, have continued to grow rapidly during the last decade, as has also occurred in most countries of the region. Only in Cuba, Ecuador, Panama, Bahamas, Belize and Antigua and Barbuda have forestry imports stagnated or declined (see figure 303).

Figure 303



The heavy concentration of forestry imports in Mexico is also reflected in each of the specific products (see figures 304, 305, 306 and 307).

Figure 304

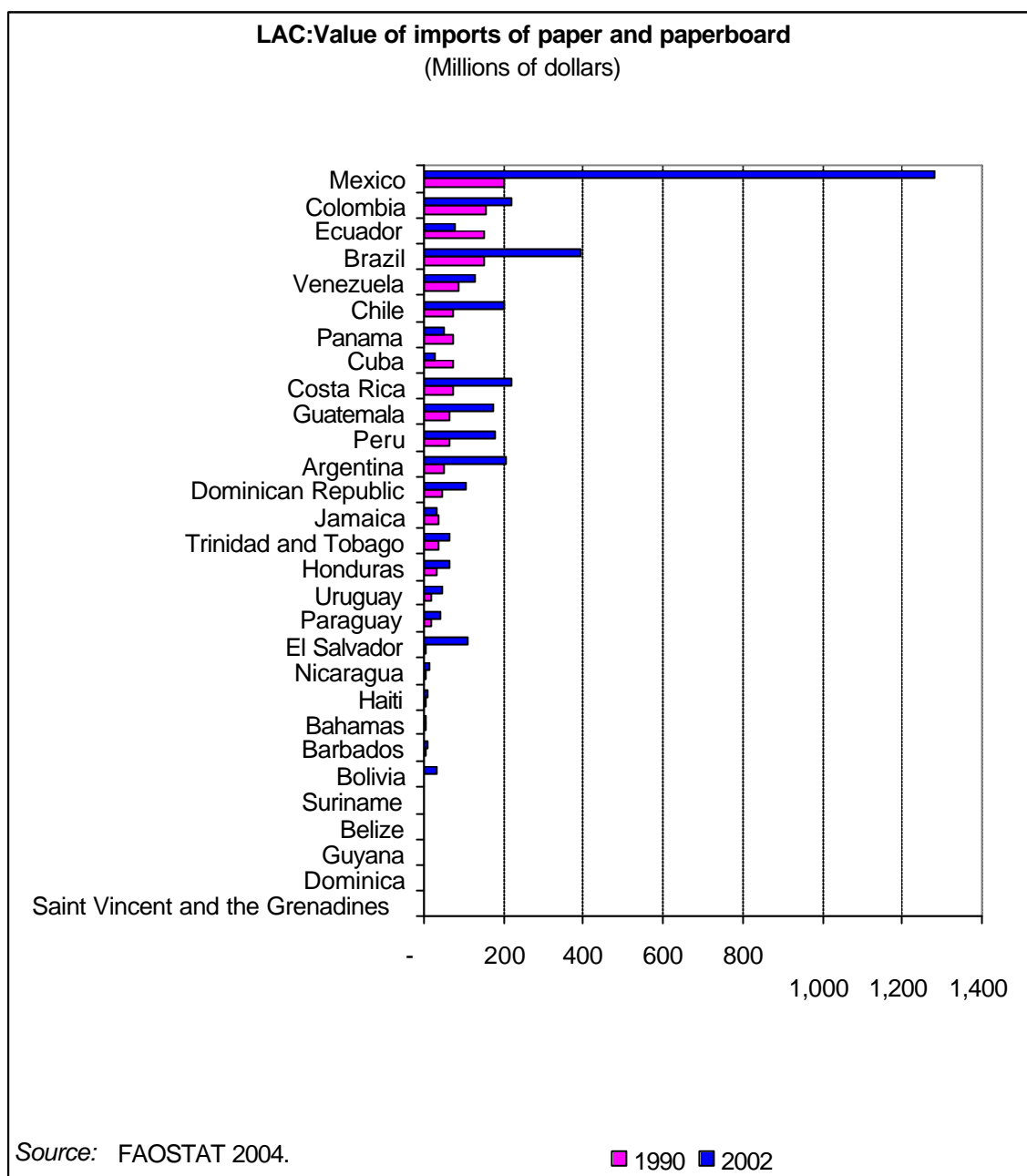


Figure 305

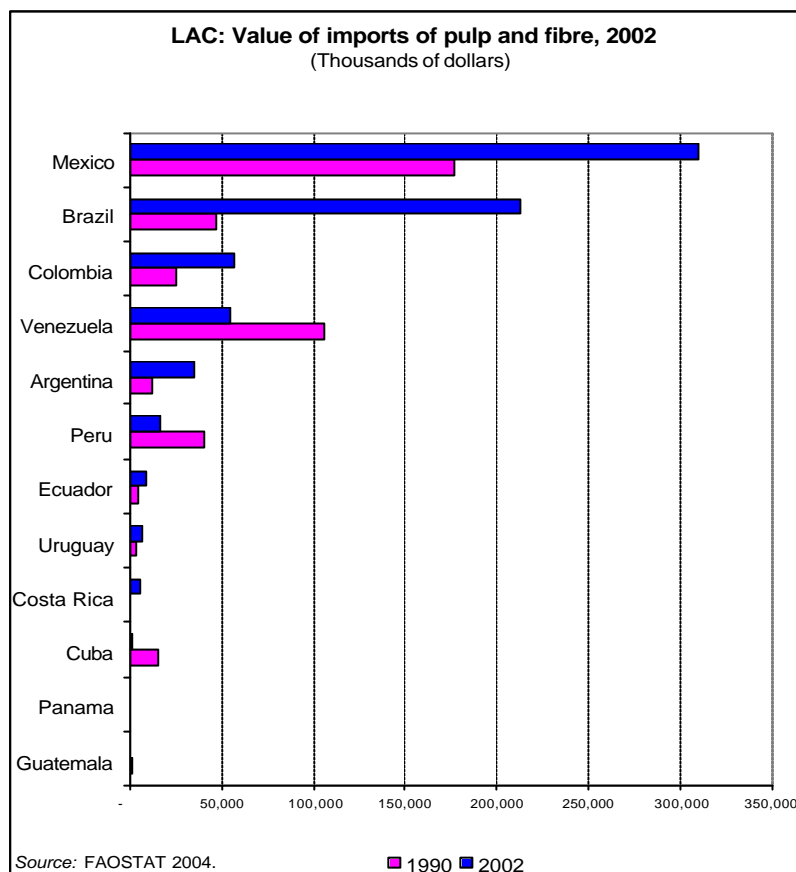


Figure 306

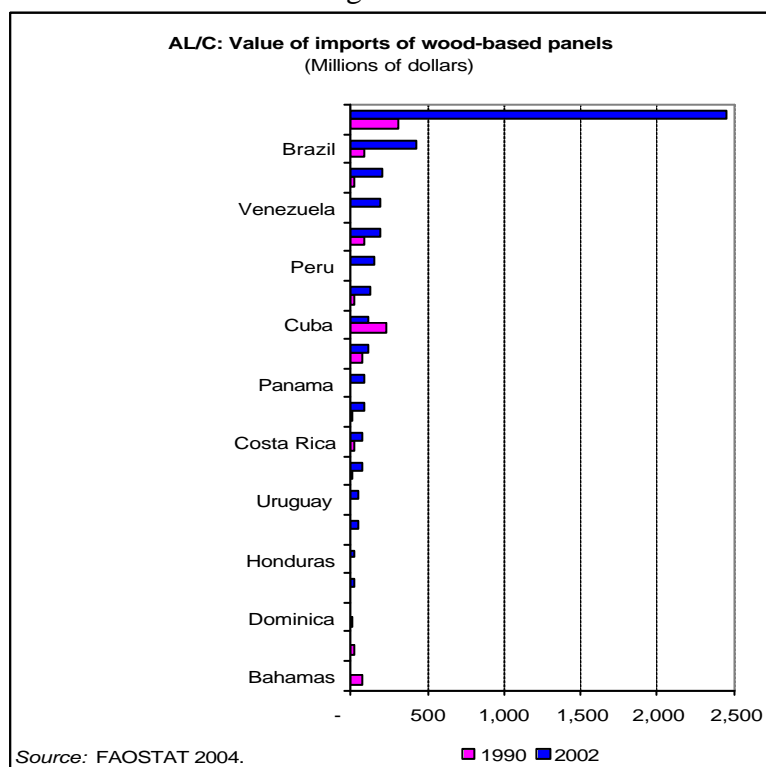
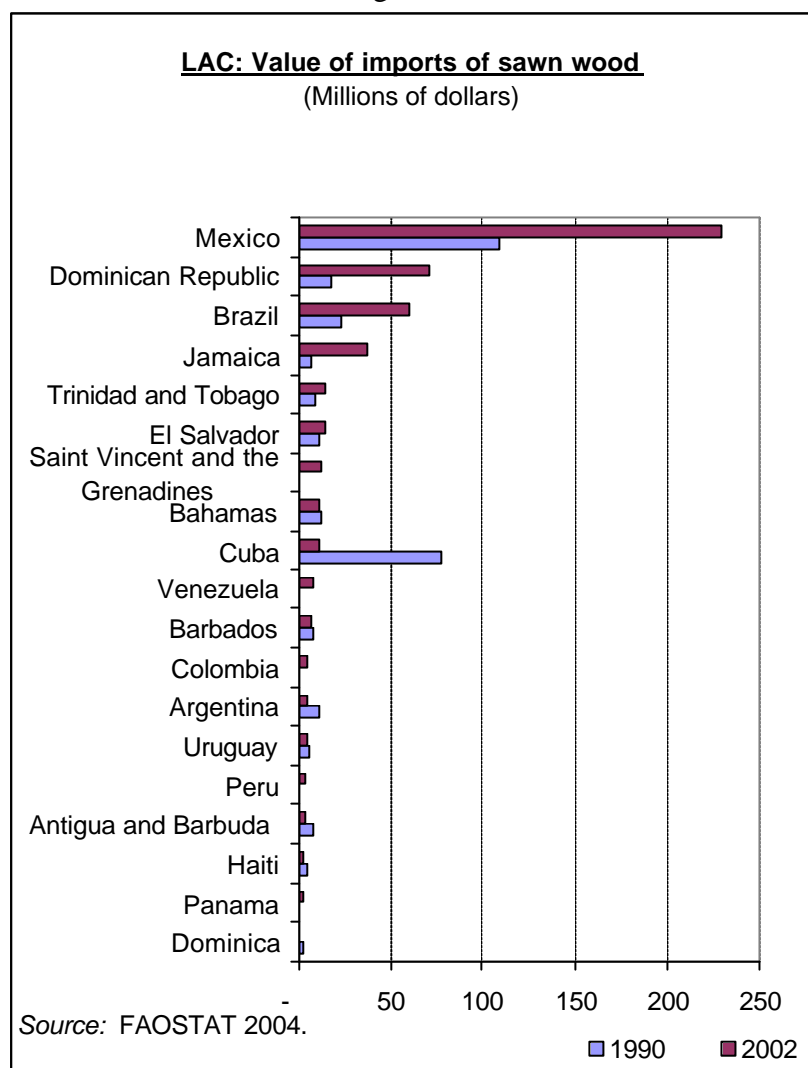


Figure 307



The development of Latin American and Caribbean forestry trade has been strongly linked to the pace of economic growth, and demonstrates a high import elasticity with respect to income. Progress has been driven by changes in legal and institutional frameworks, supported by economic integration and technical training. The forces with potential to fuel this trade in the future include the development of new financial mechanisms and productive chains.

The countries of Latin America and the Caribbean face common problems in forestry trade development – mainly high levels of deforestation, illegal felling, forest fires and pests, compounded by high production costs stemming from institutional and infrastructural shortcomings.



## BIBLIOGRAPHY

- FUNASUPO, *Informe Nacional para la superación de la pobreza*, August 1996.
- IDB (2003), *Desigualdad en América Latina y el Caribe: ¿ruptura con la historia?*.
- IDB (1998), *América Latina frente a la desigualdad*.
- Ganuza, Enrique ( ), *Tendencias del Desarrollo en América Latina y el Caribe en la última década- Con una biografía anotada*.
- Székely, Miguel and Londoño, Juan Luis (1998). *Sorpresas distributivas después de una década de reformas: Latinoamérica en los Noventa*, Chapter 5, IDB-Pensamiento Iberoamericano, Madrid, 1998.
- UNCTAD, *World Investment Report 2002*.
- UNCTAD, *World Investment Report 2002*. “Transnational corporations and export competitiveness, general overview”.  
[http://r0.unctad.org/wir/pdfs/wir02ove\\_A5.sp.pdf](http://r0.unctad.org/wir/pdfs/wir02ove_A5.sp.pdf)
- ECLAC, *Latin America and the Caribbean in the World Economy, 2001-2002*.
- ECLAC, *Foreign Investment in Latin America and the Caribbean, 2002*.
- ECLAC, *Preliminary Overview of the Economies of Latin America and the Caribbean, 2002*.
- ECLAC, *Preliminary Overview of the Economies of Latin America and the Caribbean, 2003*.
- ECLAC, *Social Panorama of Latin America, 2001-2002*.
- ECLAC, *Síntesis Panorama social de América Latina 2002-2003*.
- UN, *World Economic and Social Survey 2003*. Chapter I.  
<http://www.un.org/esa/analysis/wess/wess2003chap1.pdf>
- FAO, *The State of the World's Forests, 2003* (2003).
- FAO, *The State of Food Insecurity in the World 2002* (SOFI 2002).
- FAO, *The State of Food Insecurity in the World 2003* (SOFI 2003).
- IMF, *World Economic Outlook “Growth and Institutions”*, April 2003.
- IMF, *World Economic Outlook “Public Debt in Emerging Markets”*, September 2003.
- OECD, *Agricultural Policies in OECD Countries, 2003*.
- FAOSTAT. <http://devtest.fao.org/cgi-bin/nph-db.pl>
- UNDP, *Human Development Index 2003*.

