# Citrus growing in Cuba

## Re-launching via the processing industry

**Closely linked commercially to the former Soviet bloc, Cuban citrus growing was sorely tried by the fall of the Iron Curtain. With limited investment capacity and little prepared to face an extremely fussy and competitive international citrus market, the sector experienced a particularly difficult five years from 1990 to 1995. The setting up of a renovation plan based on the development of a processing industry has made it possible to re-launch activities.**

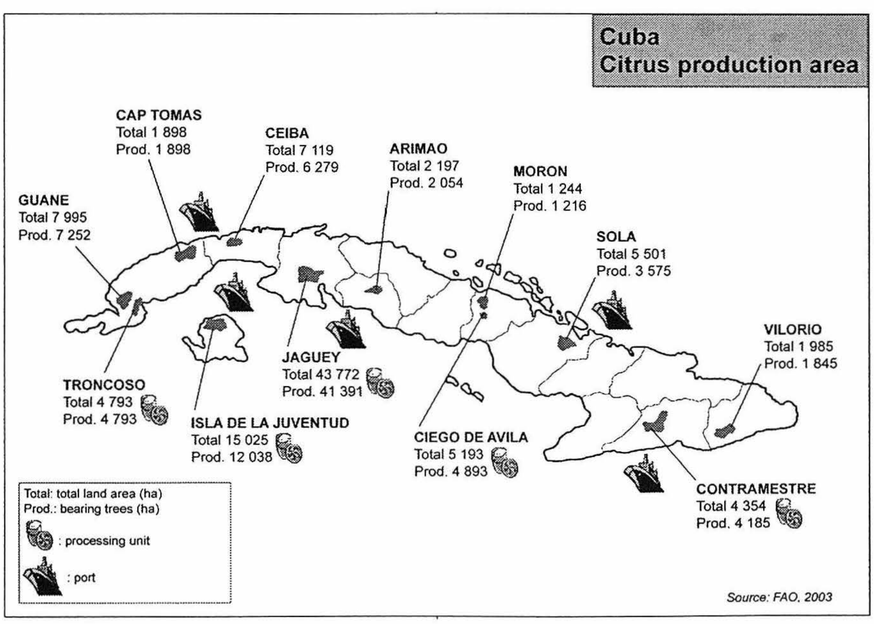
The history of Cuban industrial citrus growing started at the end of the 1960s. Cuba aimed at supplying citrus fruits to the eastern bloc, with which the country had had very close links since the 1958 revolution. Development of this crop also allow the diversification of the Cuban economy strongly centred on sugarcane. The national citrus programme was to be the keystone of this strategy. A vast planting programme was set up.

Dynamite was used to plant millions of orange and grapefruit trees at Victoria del Giron at Jaguey, some 150 km east of Havana. It was necessary to smash the rock that outcrops in places.

Other production zones emerged all over the country. They are of two types—state farms (the main ones being at Jaguey and on the Isle of Youth) and co-operatives.

### Citrus growing linked to the former eastern bloc markets

Production thus took off in a spectacular manner from the early 1970s onwards. Annual production increased by more than 15% from 1975 onwards and the symbolic million-tonne mark was exceeded in 1990. The Victoria de Giron plantation at Jaguey then covered more than 35 000 hectares. The national citrus programme was a success. Exports of fresh oranges and grapefruit developed rapidly on a single market with low quality requirements and favourable trade terms. Local consumption also increased. Everything thus went well until 1990. The communist bloc took the Cuban citrus industry with it in its fall. Cuban exporters' only market closed incredibly quickly. The quantities shipped decreased from 500 000 tonnes in 1990 to less than 100 000 tonnes two years later. In parallel, there were shortages of agricultural inputs, vehicle fuel and means of transport. Cuban citrus growing then endured a five-year nightmare during which production fell by half. Many plantations were abandoned. The situation was critical at Victoria de Giron.




### Recovery oriented towards industrial outlets

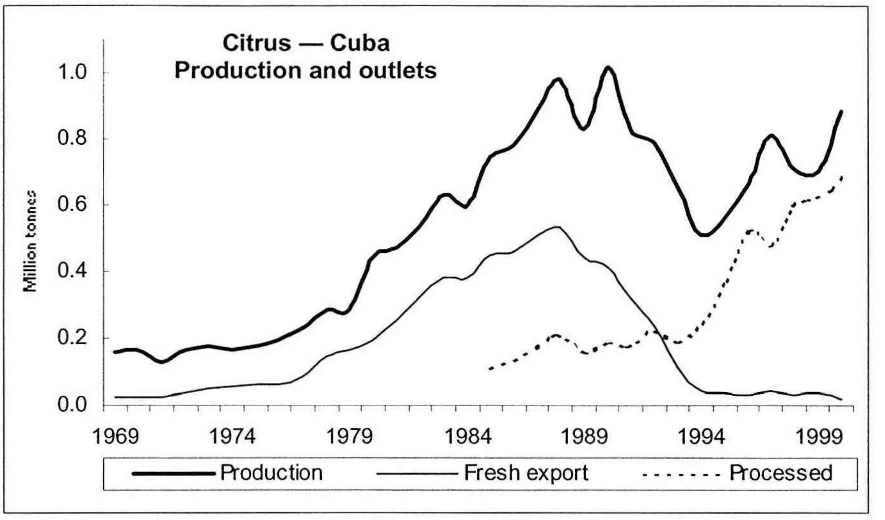
A rehabilitation programme was set up in 1994 under the aegis of the Corporacion National Del Citrico (now Grupo Empresarial Fruticola), that led the project. It was based on the observation that too much capital was needed to raise quality to world fresh fruit standards and so priority was awarded to the juice industry. This outlet had hitherto only been a way of using sorting rejects.

Measures were taken to make the sector competitive. First, production structures were changed by introducing a measure of market economy. A fair number of state farms that hitherto accounted for about 90% of production were wound up. Co-operatives (Unidad Basicas de Produccion Cooperativas) were set up to replace them. In this system, the state remains the owner of the land but awards permanent right of use to the members of the co-operative, who are none other than the people

### Main varieties

**Oranges**
Valencia is substantially dominant. The production of a few marginal plantations of Navel and China is for the local market.

**Grapefruits**
White: Marsh
Coloured fruits: pink is dominant with Ruby Red. The most commonly grown red variety is Rio Red as Star Ruby does not give satisfactory results.




who worked on the former plantations. These new structures have the advantage of being more flexible than the old ones, with the members having broader powers of decision. Furthermore, the latter can market part of production for themselves when the state quota has been met. According to a study published in 1999, half of Cuban production was then based on this type of structure and 25 to 30% of the fruits consumed locally were sold on this free market.

Technical measures were also taken. The plantations whose potential was poor were abandoned. Production methods enabling considerable cost reductions were set up to supply an industry whose quality requirements are less demanding than those for fresh fruits. Yields therefore recovered strongly, increasing from less than 9 tonnes per ha in 1990 to 12.5 tonnes per ha in 1999.

In parallel, agreements were signed with foreign investors. Grupo BM, with Israeli capital, has supported the Jaguey Grande plantation since 1991 and that of the Isle of Youth since 1996 by means of season loans (but the infrastructure remains 100% Cuban). It also provides various technical assistance (nursery, micro-irrigation, etc.). It also contributes its commercial know-how and its network. The 'Cubanita' brand is a result of this alliance. Other partnerships of this type have also been developed in the juice sector. A joint venture has been set up by a co-operative sector production unit (Pinar Del Rio) and an Italian group (Palmara). Thus, according to a study by USDA, nearly half of the cultivated land was farmed in partnership with foreign investors in 2002.

## Results

The results of the reform began to be noticeable from 1996 onwards. Production began to recover markedly and progress was regular in the subsequent seasons (except for a small problem in 1997/1998). Thus, volumes approached 900 000 tonnes in 2000 but these fine dynamics were interrupted in 2001 by particularly unfavourable weather conditions (three hurricanes in 12 months!) that

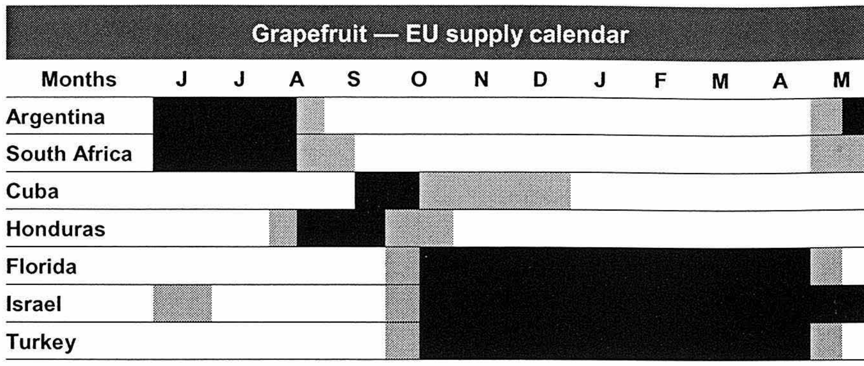
### Structure of the export sector

Exports of juice and fruits are handled by two enterprises linked with the Grupo Empresarial Fruticola and hence with the Cuban government via the Ministry of Agriculture (Minag). Citricos Caribe SA exports fresh fruits and concentrate from the co-operative sector. The latter company has a sales office in the Netherlands (Cufrut BV). Production from the Isle of Youth and from Jaguey is marketed by Grupo BM via the company Carmexco for fresh produce (Cubanita brand) and by another entity for concentrate.

| | Production zone | Volumes exported in 2000 | Trade operator |
|---|---|---|---|
| Co-operative sector | Ceiba<br>Arimao | 8 000 t grapefruit/orange | Citricos Caribe |
| Partnerships between state farms and foreign investors | Jaguey Grande | 20 000 t grapefruit/orange | Carmexco 'Cubanita' |
| | Isla de la Juventud | 1 000 t grapefruit | |

| The position of citrus in Cuban exports | |
|---|---|
| **Official peso/USD exchange rate 1:1** | **Value (1 000 pesos)** |
| Sugar | 458 210 |
| Cigars | 172 115 |
| Fish | 95 267 |
| **Citrus juice** | **58 176** |
| Non-manufactured agricultural products | 27 048 |
| Coffee | 15 862 |
| **Fresh citrus** | **14 926** |
| Rum | 13 014 |
| Molasses | 8 079 |
| Honey | 4 296 |

Source: USDA 1999




caused considerable losses and drastically reduced the potential of the 2001 and 2002 seasons. However, two bad years did not jeopardise the recovery that has started in 1996. As proof of this, 2003 harvest estimates are back up to 700 000 tonnes.

Cuba is thus gradually gaining a position on the world juice market. Indeed, the proportion of harvest quantities used by the processing industry increased from about 20% in 1990 to 75% in 2000. The 671 000 tonnes processed in 2000/2001 make the origin world number 7 among processing countries. Although this position is modest in oranges in comparison with the giants—Brazil and the United States—it comes second in grapefruit (with a little more than 12% of the world volume), just behind the United States. In contrast, fresh fruit exports have not really increased during this period, peaking at about 30 000 tonnes since 1998. The proportion of production for this outlet plummeted from 45% in 1990 to less than 5% in 2000.

## Ambitions

Production at the Jaguey plantation is now returning to the level of its golden period, with half the area cultivated in 1990.

A thousand hectares of citrus is planted each year. Indeed, the medium-term aim in Cuban citrus growing is to return to the production levels of the early 1990s, that is to say a million tonnes. Industry will be the main outlet for production. Concentrated juice will continue to be the dominant product but single juice, forming 15 to 20% of the volumes produced today, will develop.

The organic market is also a target for both processed and fresh products. A large proportion of the orchards is managed without pesticides. Some 3 000 tonnes of certified organic juice was exported in 2001 and 2 000 tonnes in 2002. The United States market would obviously be a favoured destination were the embargo to be lifted.

The ambition and determination are also there to increase exports of fresh fruits. But will this be enough on a particularly competitive world market? The development of marketing of Cuban grapefruit in the EU seems to have limits, at least today (see box). There might be a niche market in the USA in September before the start of the season in Florida. However, this

### Cuban grapefruit: a fairly small market window

The first fruits generally arrive in the European Union in mid-September. The market share achieved depends closely on the volume of South African fruits still available. Furthermore, Cuba is also in competition with Honduras, another inter-season origin, at this time of year. The latter has the advantage of starting before Cuba (during the first part of August). Competition with this origin is therefore fierce and strongly organised commercially around a trader, Dole, that groups most of quantities. Nevertheless this period from mid-September to mid-October is that most open to Cuban grapefruit. It becomes difficult for the origin to sell quantities to the major distributors after mid-October since most of these operators reserve their shelf space for fruits from Florida, Israel and Turkey, which have the advantage of being available until April-May. The development of Turkish exports in recent seasons makes the task even more difficult. The potential clientele is thus becoming even more limited and is refocused on wholesalers and the catering industry. However, Cuban fruits often weigh less than 300 grams (grade 45 and over) and this is a handicap for penetrating this customer segment.

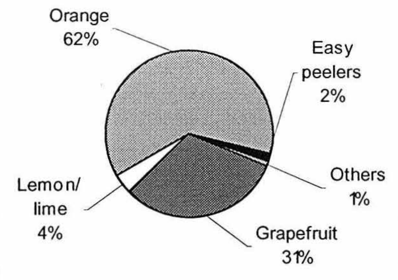
The share of Cuban grapefruit in the overall supply of the EU market is very modest and peaks at 3%. The decrease in 2002 results from production losses caused by the three hurricanes that swept the island between November 2001 and November 2002. All the sector operators recognise the excellent taste qualities of the produce that are those of fruits harvested in the tropics (high sugar content and low acidity). The main scope for improvement of quality lie in peel thickness and colour. These factors have been taken into account in production.

**Citrus — Cuba exports in 2000 — tonnes**

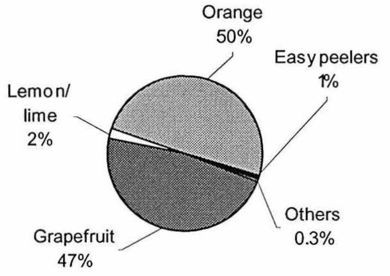
| | | Orange | Grapefruit | E. peelers | Lime | Total |
|---|---|---|---|---|---|---|
| **Juice** | frozen concentrate | 25 870 | 21 897 | 275 | 85 | **48 127** |
| | single | - | - | - | - | **14 482** |
| **Fresh** (orange and grapefruit) | | - | - | 8 | - | **29 600** |
| **Essential oil** | | 738 | 278 | - | 19 | **1 043** |

Cuban professional sources

**Distribution of planted areas by species**




**Production distribution by species**




hypothesis depends again on the lifting of the embargo. In contrast, there might be significant scope for medium-term growth on the markets previously supplied with Cuban citrus fruits (especially the Russian Federation) and that are far from having recovered their Iron Curtain period consumption levels.

Cuban oranges are green at maturity and cannot be sold in the EU today as community regulations stipulate that fruit colour must be typical of the variety. Negotiations concerning a change to the EC/UNO standard to allow the marketing of green oranges—with the condition of a yet to be defined minimum juice content—are well advanced. This change would then we entered in the EU standard in the medium term.

Nevertheless, the impact of this measure should not be overestimated. Indeed, the taste characteristics are also different and seem little suited to the European market (sugar:acid ratio very different to that of Mediterranean fruits). The consumer will decide! ■

### For further information

Cuban agriculture.
www.cubanag.ifas.ufl.edu/default.htm

Citrus production in Cuba: growth and market prospects. Soon available at: http://www.fao.org/unfao/bodies/ccp/citrus/2003/cit03-e.htm

The Potential Impact of Hurricane Michelle on the Cuban Citrus Industry.
http://edis.ifas.ufl.edu/BODY_FE328

Cuba's citrus industry.
http://www.cubanag.ifas.ufl.edu/pdf/citrus1.pdf

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**Share of Cuban grapefruit in EU market supplies**

| Tonnes | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Florida | 98 022 | 110 569 | 124 539 | 132 837 | 147 167 | 158 535 | 136 598 | 124 720 | 105 931 | 109 919 | 113 805 |
| South Africa | 44 864 | 40 308 | 57 660 | 51 212 | 54 548 | 53 383 | 90 777 | 72 789 | 92 182 | 64 283 | 82 682 |
| Turkey | 16 156 | 15 809 | 15 858 | 19 633 | 35 937 | 27 520 | 25 444 | 40 857 | 49 773 | 40 276 | 47 250 |
| Israel | 95 240 | 57 524 | 34 528 | 47 026 | 78 833 | 93 376 | 86 989 | 87 250 | 65 273 | 55 706 | 45 033 |
| Argentina | 41 123 | 27 438 | 23 646 | 29 304 | 30 998 | 27 452 | 24 865 | 19 942 | 14 456 | 18 911 | 18 796 |
| Cyprus | 50 703 | 46 795 | 40 784 | 40 255 | 32 830 | 27 791 | 15 791 | 20 579 | 14 840 | 15 571 | 14 778 |
| Other | 13 309 | 58 874 | 76 391 | 91 737 | 17 062 | 11 476 | 10 114 | 9 270 | 7 900 | 12 645 | 10 024 |
| Honduras | 14 566 | 2 708 | 402 | 569 | 15 824 | 15 686 | 12 314 | 15 228 | 11 935 | 10 663 | 8 912 |
| Swaziland | 11 925 | 9 122 | 13 408 | 11 813 | 15 357 | 9 262 | 16 567 | 11 241 | 10 928 | 8 549 | 8 724 |
| **Cuba** | **13 718** | **18 567** | **12 018** | **11 729** | **18 822** | **15 998** | **8 923** | **12 588** | **10 291** | **11 284** | **5 847** |
| % total supply | 3.3 | 4.6 | 2.9 | 2.6 | 4.1 | 3.5 | 2.0 | 2.9 | 2.6 | 3.1 | 1.6 |
| Mexico | 586 | 719 | 363 | 1 294 | 1 967 | 1 474 | 2 452 | 2 730 | 1 619 | 5 781 | 3 926 |
| **Total imports** | **399 626** | **387 714** | **399 234** | **436 115** | **447 378** | **440 479** | **428 382** | **414 464** | **383 509** | **347 807** | **355 851** |
| Spain shipments | 12 411 | 13 234 | 15 244 | 17 568 | 12 981 | 16 024 | 16 635 | 17 224 | 18 238 | 16 551 | 18 709 |
| **EU supply** | **412 037** | **400 948** | **414 478** | **453 683** | **460 359** | **456 503** | **445 017** | **431 688** | **401 747** | **364 358** | **374 560** |
| EU reshipments | 118 707 | 105 712 | 127 223 | 160 738 | 172 758 | 173 182 | 176 804 | 214 571 | 175 294 | 141 465 | 133 346 |

Source: Eurostat