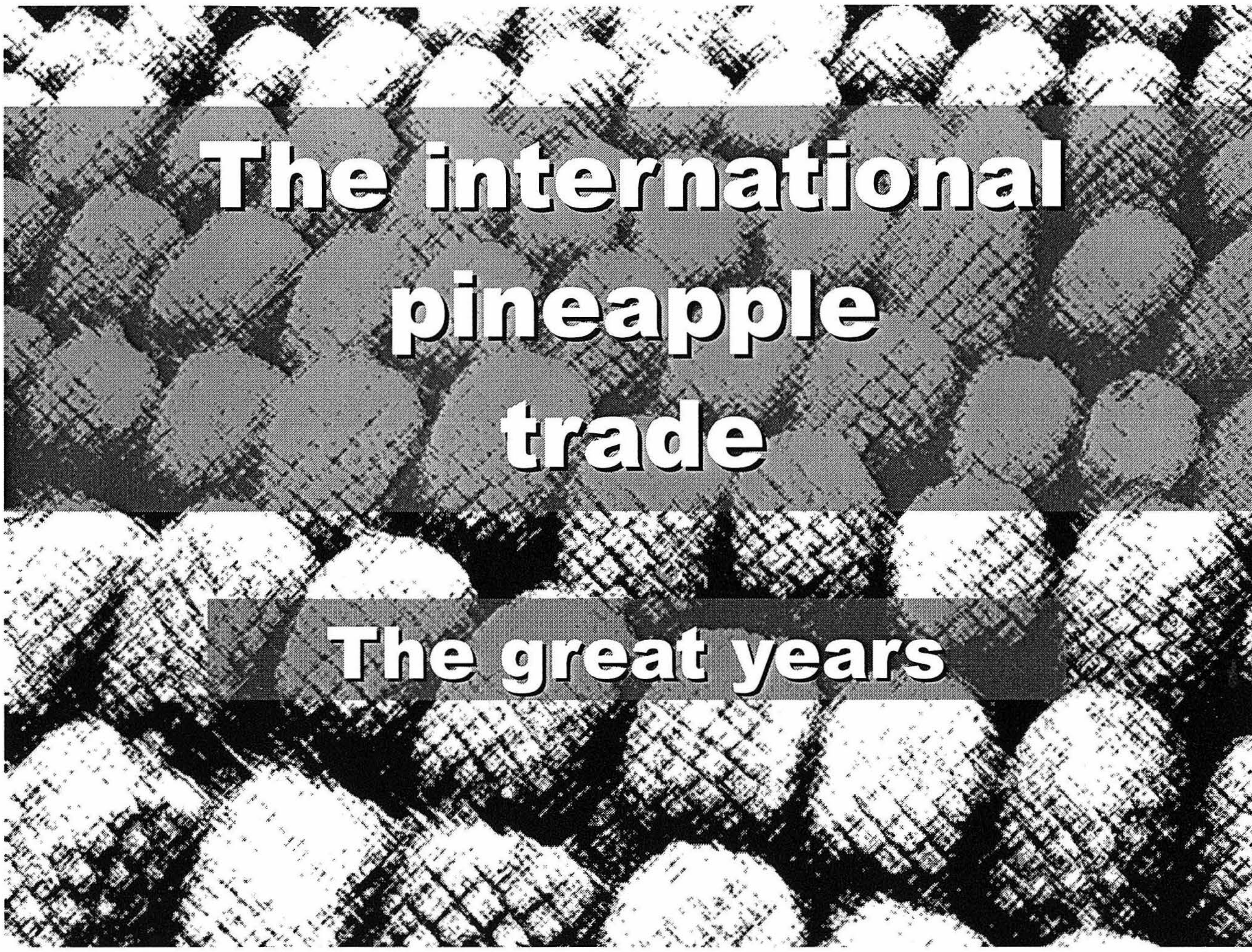


The international pineapple trade

The great years

Pineapple has shown some of the best performance in the fruit and vegetable sector during the past decade. Consumption of fresh pineapple rocketed in Europe and the United States. Del Monte did the rest by segmenting the market with the 'Sweet' variety and using its formidable production and marketing organisation. Nevertheless, the economic incongruity of ten busy years of increased volume together with improvement of the status of the fruit is reaching an end. The whole world rushed to this eldorado and 'Sweet' development projects were launched everywhere. The situation is more classic in processing. Asia is still the driving force and the market still seeks greater supply stability so as to increase the consumption of juice and canned products.

World pineapple production totals nearly 16 million tonnes. It is the 9th largest fruit crop after pear and ahead of peach and nectarine. Just 12 countries account for 80% of production. Six of these are in Asia (Thailand, the Philippines, China, India, Indonesia and Vietnam), four are in Central and South America (Brazil, Costa Rica, Mexico and Colombia) and two in Africa (Nigeria and Kenya).

The performance of pineapple makes it a star fruit in the international fruit sector in the long term. Indeed, pineapple production has increased more rapidly than that of fruits in general. With index 100 in 1960, pineapple reached 415 in 2005 against only 291 for fruit.

Examination of production dynamics over a 45-year period reveals several major trends:

- production has increased four-fold (from 4 to 16 million tonnes),
- the first break took place at the beginning of the 1980s, with an unprecedented decrease in production (falling by 17% to 8.7 million tonnes),

- supply resumed growth rapidly in 1984, and this continued unbroken until 1993 (12.7 million tonnes),
- stability dominated until 1998. The second break occurred in 1999 when supplies suddenly increased by 2 million tonnes in one year (rising by 16% to 14.4 million tonnes),
- the supply increase has since been steady and controlled (with annual growth of 1 to 3%).

The increase in the quantities available is closely linked to a rise in demand on the major import markets in the North. The degree of internationalisation (the import:production ratio) has increased for 45 years, rising from 16% in 1960 to 47% in 2005. One pineapple in two is grown for sale on export markets.

It is difficult to go further in a general study of the market without addressing the various component sectors. In fact it groups worlds that have very little in common—that of fresh fruits and that of processed fruits. Three-quarters of the 7.4 million tonnes (fresh fruit equivalent) traded in the world is in the form of canned products or juice. In 2005, the fresh fruit market formed a quarter of the total pineapple market against only an eighth at the beginning of the 1960s.

Processed pineapple: between information and hype

With the exception of a slump in the second half of the 1990s, canned pineapple and juice are responsible for the phenomenal dynamism of this fruit. World trade has increased four-fold since 1984 from 1.3 to 5.6 million tonnes (fresh fruit equivalent). In 2004, two thirds of exports consisted of juice (single or concentrated) and the remaining third was canned goods (rings or pieces).

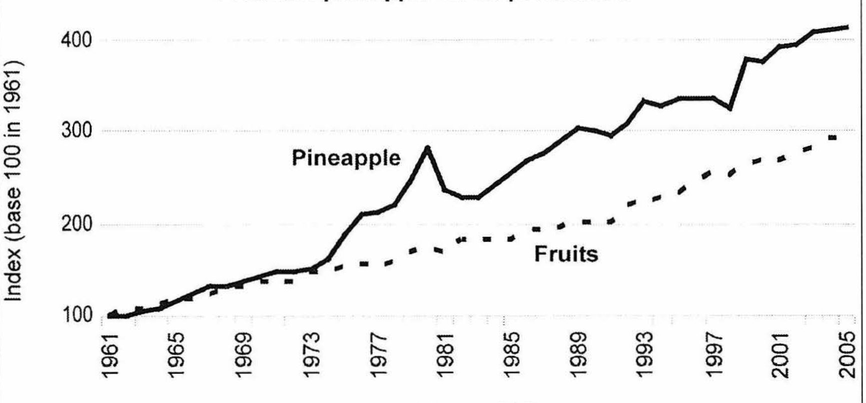
A major feature of the pineapple market is its regional specialisation. Asia leads in processed pineapple. Thailand, the Philippines, Indonesia and, more recently, Vietnam have the major proportion of pineapple processing capacity. The rapid relocation or rather delocation of production of pineapple for processing is a permanent feature of the sector. The relative competitiveness of each production country moulds the world processed pineapple landscape. Vietnam seems to be the last country to have caught pineapple fever and projects are numerous there.

In a more general manner, the processed pineapple market is sensitive to two factors: the announcement of production forecasts, especially in Thailand, the leading production country, and international demand. Strongly cyclical supply is a feature of the sector; this is caused by recurrent weather problems (floods or marked drought) and a tendency of canners and juice manufacturers to speculate by twisting information about the quantities available. This speculation makes purchases of pineapple a complex business for the agroindustrial sector—the end-users of pineapple concentrate or rings. The structural instability of the market makes it less attractive, especially as demand for pineapple juice depends on the quality of supplies and above all on the price of the other fruit juices. The continual fluctuation of the pineapple juice market encourages American and European industrialists to use less pineapple in their multi-fruit juice recipes and to work on other specialities (apple, orange, etc.).

Production by the Asian origins has been comparatively stable recently, allowing the market to recover after years of very strong variation in supplies. The current moderate price level of pineapple concentrate should encourage the industry to return to this product while the international price of concentrated orange is beating all records. Indeed, the latter was selling at about USD 1 700 per tonne c&f Europe at the beginning of 2006 whereas the price of pineapple had fallen to USD 1 100 per tonne. It is reminded that pineapple peaked at USD 1 700 USD in mid-2005 (source: MNS).

The situation in canned pineapple is very different. The market has been stable for several months. At the

Fruit and pineapple world production



Source: FAO

Pineapple — World production and imports — Tonnes

	World production	Imports - Fresh fruit equivalent				
		Concentrate	Single juice	Canned pineapple	Fresh pineapple	Total imports
Aver. 1969-71	5 467 282	2	145 681	738 506	160 356	1 044 545
Aver. 1979-81	9 780 756	3 042	342 479	982 024	365 659	1 693 204
Aver. 1989-91	11 224 674	2 338 905	286 742	1 477 612	586 539	4 689 799
1998	12 174 673	1 657 535	419 266	1 382 769	860 619	4 320 190
1999	13 651 158	2 108 821	465 277	1 641 889	1 031 629	5 247 617
2000	13 706 726	1 850 634	485 930	1 695 251	1 051 819	5 083 634
2001	14 940 509	1 972 422	624 767	1 648 255	1 153 726	5 399 170
2002	14 959 672	3 043 188	421 616	1 663 874	1 315 217	6 443 895
2003	15 145 631	3 462 131	431 355	1 818 427	1 457 687	7 169 600
2004	15 698 667	3 304 070	450 360	1 888 479	1 705 946	7 348 855

Source: FAO, CIRAD

beginning of 2006, prices were practically the same as those of a year ago. Boxes of 24 x 20 oz cans of pieces in light syrup sold at between USD 6.50 and 6.80 while rings in light syrup fetched USD 8.00 to 8.50 (source: FoodNews).

One of the main novelties of the processed fruit market—and especially juice—is the appearance of a measure of segmentation. The market was hitherto centred on the sacred 'Smooth Cayenne' variety but some supplies of 'Sweet' pineapple juice are now becoming available. This is of course a direct consequence of the tremendous increase in the quantities of 'Sweet' available on the world market for fresh fruit sales. Costa Rica is the main supplier of this kind of juice.

Fresh pineapple: effervescence

It is difficult not to be enthusiastic on the subject of the international fresh pineapple market. Two figures prove how the superlatives are deserved: fresh pineapple imports have doubled since 1999 in both the United States and Europe. In 2005, these two zones each took nearly 600 000 tonnes of pineapple! Success was complete as, in contrast with the theory of supply and demand, this strong increase in world supplies, and hence of pineapple imports, did not result in a decrease in price. Unit value even increased. The United States is the leading import market and the price rose from less than USD 400 per tonne in 1994 to a peak of USD 580 in 2002. Imports increased from 131 000 t to over 400 000 t during the same period.

The exemplary performances above obviously concern 'Sweet' pineapple that has totally changed the situation on the world market.

The European market has been many-faceted for 10 years. In the mid-1990s it lost its monolithic structure consisting of one variety—'Smooth Cayenne'—and one origin—Côte d'Ivoire. A new variety, 'MD-2' or 'Extra sweet' developed beside the traditional supplies and Costa Rica emerged as a new origin and is now the market leader.

It would be wrong to summarise such success as the result of a simple combination of origin and variety. It is true that although it is not easy to grow, 'Sweet' seems to have proved its worth both in the field and on supermarket shelves. However, nothing would have been as rapid and effective without the transnational corporation Del Monte's logistics and commercial strategy. Indeed, after a sales attempt with mixed results ('Champaka' type variety with green skin), the company started Costa Rican production of the hybrid 'MD-2' bred by the former Pineapple Research Institute (PRI) of Hawaii in the 1960s (***FruiTrop*** 122, page 11). The rest was the result of rationalisation of production (several thousand hectares of land in a single holding, an ultra-modern packing station and high-level agricultural support), reliable and rapid export logistics, efficient organisation of sales and a powerful marketing plan. As a result, 'MD-2' entered the high-quality segment and gradually gained a market position. Côte d'Ivoire was elbowed out of its own market, Europe, in just a few years by the Costa Rican machine for success that has also gained a near monopoly of the US market.

However, the Del Monte honeymoon is coming to an end. It is difficult not to attract competitors to the market after such a sales performance. After disputes and court hearings (***FruiTrop*** 122, page 11), Del Monte has had to abandon exclusive rights to the variety. Whatever the decisions of the US courts, competitors large and small hurried on to the scene. Dole, Chiquita, Fyffes and also totally unknown operators developed their own supplies first in Costa Rica and then soon in Latin America and Africa. 'Sweet' has now become the standard, definitively taking the top spot from 'Smooth Cayenne'.

The end of an era

Things have changed a lot. Supplies are plethoric, operators are numerous and sometimes not very professional and fruit quality is uneven. 'Sweet' suppliers are no longer market makers but have

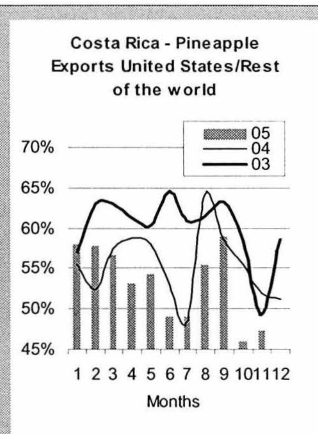
Pineapple — European Union imports — Tonnes

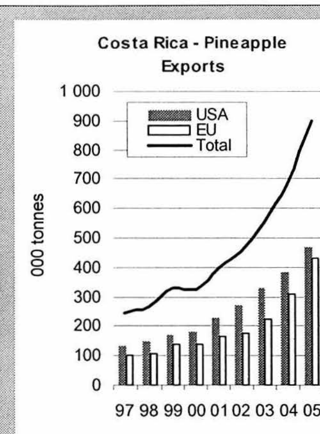
Years	Extra-EU of which	Costa Rica	Côte d'Ivoire	Ghana	Ecuador	Honduras	Brazil	Others
1976	70 884	10	52 272	63	2	8 283	31	10 223
1977	60 826	22	48 257	12	81	1 655	348	10 451
1978	98 487	12	81 163	135	11	4 561	49	12 556
1979	93 573	19	76 640	75	9	3 052	252	13 526
1980	90 300	26	78 275	105	0	1	122	11 771
1981	90 801	25	83 028	539	0	0	4	7 205
1982	90 605	30	81 727	440	0	338	33	8 037
1983	89 055	16	79 663	435	0	110	252	8 579
1984	121 555	1 717	107 875	1 173	8	13	857	9 912
1985	171 760	1 077	159 798	1 554	8	0	48	9 275
1986	178 251	1 877	165 158	1 956	153	0	462	8 645
1987	199 265	12 107	171 202	2 709	0	60	1 176	12 011
1988	201 835	23 115	145 425	3 264	0	3 286	1 758	24 987
1989	183 707	26 642	132 262	4 604	30	7 169	1 191	11 809
1990	206 176	28 413	140 797	6 060	5	19 447	348	11 106
1991	215 243	34 149	134 795	6 766	12	18 747	29	20 745
1992	228 633	38 271	132 033	7 126	31	13 920	521	36 732
1993	211 989	39 410	111 917	10 917	40	3 231	6 011	40 463
1994	226 172	45 832	120 311	13 746	73	325	9 747	36 139
1995	230 587	49 735	119 565	11 917	66	28	1 674	47 602
1996	274 955	64 314	153 947	22 199	133	10 288	114	23 959
1997	281 457	83 401	154 296	23 911	16	10 005	18	9 810
1998	263 214	79 024	141 580	18 917	521	9 601	107	13 464
1999	332 589	106 226	177 775	25 660	1 233	6 371	54	15 270
2000	318 298	112 741	158 164	29 322	348	5 175	52	12 496
2001	366 948	135 024	174 505	32 590	3 564	9 111	220	11 935
2002	369 951	139 172	160 537	36 214	7 823	13 385	230	12 590
2003	412 234	179 154	135 719	44 379	19 575	13 329	802	19 276
2004	526 451	252 105	137 328	51 684	27 541	17 670	10 237	29 886
2005*	606 784	361 250	98 984	44 970	32 585	25 275	12 654	31 066

Source: Eurostat / *: provisional data

Costa Rica unwavering!

Will the million-tonne mark be reached and exceeded in 2006? The question would have drawn a smile just two years ago. It is now possible with the exceptional export performance of the world's 7th largest producer. We now wonder whether this symbolic level will be reached in the first half of 2006 or in the third quarter. It should be said that Costa Rica spares no effort. The annual growth rate from 2004 to 2005 was 30%, after a hallucinating 25% the preceding year. Exports were multiplied by 3.7 from 1997 to 2005! The United States took 52% of annual exports against 60% in 2003. The EU could become Costa Rica's main export market from this year onwards if the trend continues.





Fresh pineapple - Costa Rica exports - Tonnes

	2003				2004				2005			
	Total incl.	**USA**	**EU-15**	**Others**	**Total** incl.	**USA**	**EU-15**	**Others**	**Total** incl.	**USA**	**EU-15**	**Others**
January	38 467	21 911	16 374	183	38 630	21 426	17 096	108	45 103	26 173	18 847	83
February	34 094	21 503	12 504	88	38 982	20 433	18 168	381	52 005	30 079	21 751	175
March	38 117	23 999	14 001	117	56 299	32 317	23 595	387	62 375	35 381	26 767	227
April	45 836	28 058	17 634	144	51 644	30 333	20 855	456	80 843	42 944	37 702	197
May	49 445	29 863	19 433	149	76 544	44 354	31 414	777	99 876	54 262	45 284	331
June	45 114	29 103	15 851	160	70 573	37 314	33 175	84	89 214	43 742	45 177	296
July	46 682	28 397	18 142	143	56 641	27 397	29 105	140	101 538	49 871	51 491	175
August	42 053	25 887	15 878	288	50 495	32 422	17 984	88	58 449	32 415	26 030	5
September	48 879	30 944	17 675	259	57 561	33 669	23 559	333	65 513	38 571	26 890	52
October	59 272	34 554	24 507	211	60 355	33 511	26 502	342	76 065	35 027	40 951	87
November	59 513	29 273	29 983	257	72 155	37 441	34 451	263	92 586	43 737	48 836	14
December	47 934	28 109	19 565	260	64 259	32 903	31 237	120	77 396	34 556	42 790	50
Total	**555 407**	**331 601**	**221 548**	**2 259**	**694 140**	**383 519**	**307 142**	**3 479**	**900 963**	**466 755**	**432 517**	**1 691**

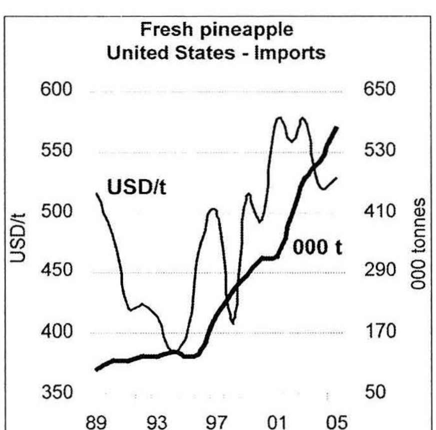
Source: Customs

become market takers and follow the flow. However, in the article below Thierry Paqui shows that 'Sweet' has better resistance to market degradation than 'Smooth Cayenne'. However, there can be concern about the increase in supplies in the short term. Indeed, Costa Rica and many other origins (Ecuador, Honduras, Panama, Ghana, etc.) are developing their production capacity. The attraction works wonderfully but risks operating at the expense of the producers who invest in this sector.

And what about Africa?

A historical supplier with a monopoly in Europe for many years, Côte d'Ivoire lost its leading position to Costa Rica in 2003. But this loss of influence (market share of less than 20% in 2005 against 50% in 2000) does not mean that Côte d'Ivoire is giving up as it still exports some 150 000 t of pineapple per year. It has switched a large proportion of the area under pineapple to 'Sweet' while conserving a large 'Smooth Cayenne' production base. The key to success is still improved quality, stability and homogeneity.

African pineapple also increasingly means Ghana. Its ambitions are clear and its export performance is a clear demonstration of its current growth phase. Its exports now total 52 000 tonnes (2004) and it is firmly in position as the third largest supplier of the European market. Ghana's development is based on the 'Sweet' variety. Other countries would like a share of European market growth. Honduras, traditionally the fourth supplier, is losing its position to Ecuador, Brazil or Panama, with the latter declaring that pineapple is a great national cause. The same applies to Ecuador which has gained market shares in the United States (second largest supplier) and in Europe. The banana group Noboa has just announced that it wishes to further its diversification and include pineapple among other things. In the Caribbean, the Dominican Republic is unveiling its plans, announcing 'Sweet' pineapple production capacity of 64 000 tonnes by 2010.

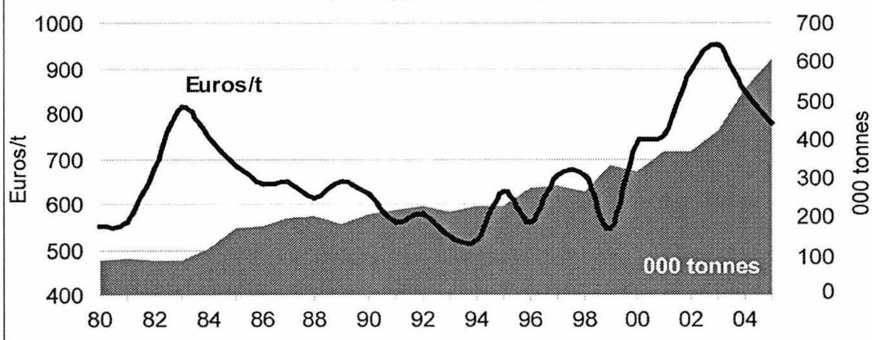


Source: USDA

It remains to be hoped that the spectacular increase in consumption continues in the United States and Europe. It is true that the annual per capita consumption of a few hundred grammes in Europe is very far from the 20 kg of banana or citrus eaten each year.

The discovery of new growth areas is also a way of fanning the flame. The best candidates are to be found in Eastern Europe, with the 10 new member-states (NMS) and Russia. Imports by the NMS are still

Fresh pineapple - EU - Imports



2005: provisional / Source: Eurostat

symbolic (4 000 to 5 000 tonnes per year), that is to say a few grammes per person per year. The per capita income is low in these countries and pineapple is not in the same food category as the other fruits. It is considered as a festive fruit to be eaten occasionally and at certain times of the year.

Segmentation again

Certain that the battle has already been lost to a considerable extent as supplies are growing much faster than consumption, Del Monte would like to regain control of an area that brought it good fortune—segmentation. The company has announced for more than two years now that it possesses a new variety, 'MA-2', that will be marketed under the name 'Honey Gold'.

It is difficult to say when the new variety will be released on the market. Copiers beware! It has already been patented and hence protected, at least in the American system. We do not yet know its organoleptic and visual features but it is fairly improbable that Del Monte will be able to write a magnificent episode of the international history of fresh pineapple for the second time in 10 years. The company is not alone though in attempting to re-launch the market by means of segmentation. There should be a few surprises in the coming years ■

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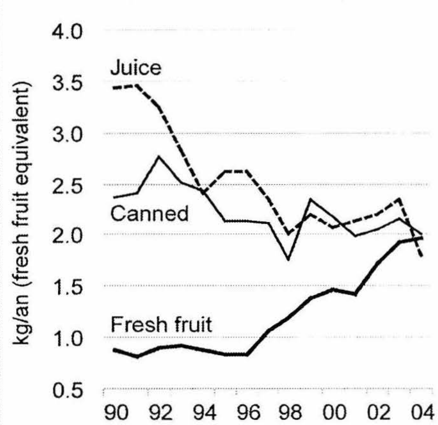
Pineapple - USA - Consumption



Source: USDA

Fresh pineapple in the United States: Costa Rica manoeuvring

Pineapple is the fifth fruit in terms of consumption in the United States after orange, grapes, apple and banana. Per capita consumption of fresh pineapple has caught up with (2004) and even exceeded (2005 forecasts) that of juice or canned fruits for the first time. This is the result of both a deep-seated downward trend in the consumption of processed pineapple, especially juice, and the steady increase in fresh pineapple consumption since the mid-1990s. This is reported to have reached 2.2 kg per person per year in comparison with 640 grammes in 1985. According to USDA, the reasons for increased consumption of fresh pineapple are as follows:

- the change in supplies and in particular the sale of 'Sweet' type pineapples that match consumer expectations;
- the growth of sales of fresh-cut produce;
- promotion operations and strongly increased ethnic consumption resulting from the flow of immigrants from Asian zones in the tropics and from Latin America.

Costa Rica accounts for 76% of the import market against 85% in 2002. This is proof that other countries such as Ecuador, Honduras, Guatemala and Mexico now participate in this formidable market dynamics. Indeed, US imports totalled some 577 000 tonnes in 2005, that is to say 13% up on 2004. They have increased five-fold since 1991. Indeed, US production in Hawaii is fading away. The island's processing industry only handles 105 000 tonnes of fruit (2004) in comparison with 550 000 tonnes in 1983. However, the fresh fruit sector still sells some 90 000 tonnes of pineapple mainly to the continental domestic market.

United States - Fresh pineapple imports - Tonnes

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total, of which	**135 255**	**203 993**	**252 848**	**283 097**	**318 837**	**321 299**	**405 714**	**476 660**	**511 050**	**577 605**
Costa Rica	84 695	154 183	200 899	226 029	257 783	261 199	344 731	399 826	392 323	438 767
Ecuador	3 943	4 193	2 289	5 163	6 505	8 443	17 780	28 578	33 608	37 199
Honduras	27 099	24 680	26 950	33 555	32 841	20 122	20 629	24 728	34 419	32 988
Guatemala	398	100	266	1 718	633	2 531	733	2 918	17 563	32 491
Mexico	7 987	15 414	17 597	14 491	17 200	24 527	18 041	14 974	27 033	27 339
Thailand	2 803	2 404	2 951	2 093	2 837	3 605	3 095	4 191	3 996	4 548
Panama	2 553	256	136	0	125	255	422	482	1 762	3 774

Source: USDA