Situation and Outlook for Macadamia Nuts

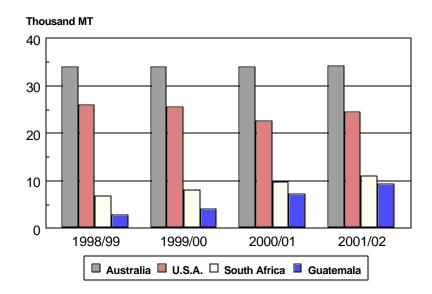
Macadamia nut prices continue to fall in the United States as a result of world oversupply. Total world supplies are forecast at a record 118,688 tons for 2001/02, up 8 percent from last year. Forecasted acreage and yield increases in Australia and South Africa, the world's first and third largest producers, respectively, are expected to increase world supplies even more in 2002/03. The lingering effects of the economic crisis in Asia, the largest regional market for U.S. exports, are disappearing. However, stiff competition from other macadamia producing countries and a strong U.S. currency continue to weaken demand for U.S. exports. Exports from selected countries are forecast to increase 16 percent to a record 58,952 tons. Australia remains the world's largest exporter of macadamias, accounting for 46 percent of total world exports. The United States, the world's second largest producer, is the largest single export market for Australia, South Africa, Guatemala, Brazil, and Costa Rica.

GLOBAL PRODUCTION

World production of macadamia nuts is expected to reach 87,754 metric tons in 2001/02, up 8 percent from the previous year. Approximately 40 percent of all the macadamia nuts produced worldwide originate from Australia.

The top four producers in 2001/02 are Australia (34,300 tons), United States (24,494 tons), South Africa (11,000 tons) and Guatemala (9,360 tons). Other key producers include Costa Rica and Kenya.

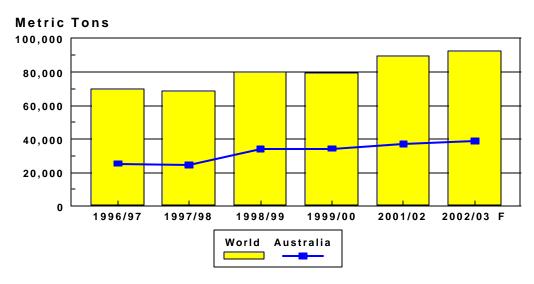




Australia

Australia is the world's largest macadamia nut producer. Output in 2001/02 is forecast at 34,300 tons, an average size crop. Although the season started well for macadamias, a return to normal weather conditions in mid-season slightly reduced yield potential. Climatic conditions deteriorated further in the lead up to harvest, with the crop experiencing hot and dry conditions. High wind and low humidity during this time adversely affected soil moisture, further reducing yield potential. As a result, the crop achieved only average yields. Commercial production has traditionally been centered in northeastern New South Wales with some production in southeastern Queensland. However, as a result of recent planting, Queensland now accounts for around 40 percent of total production. New South Wales produces over half of Australia's production, while small plantings exist in Western Australia. Macadamia trees require rich soils and high annual rainfall or irrigation to produce commercial quantities of nuts.

Australian Contribution to World Production



Guatemala

The Guatemala nut crop for 2001 is estimated at 9,360 tons benefiting from favorable weather conditions. Average yields for 2001 are estimated at 5.8 tons/hectare, up from the previous year's average of 4.9 ton/hectare. Increases in yields are mainly due to maturing trees and good agricultural and management practices. In 2002, production is forecast to increase to 9,800 tons, with average yields expected to remain steady at 5.8 tons/hectare. Some increases in yields are expected in the next five years as new plantings begin bearing fruit, new trees are planted and older trees mature.

Guatemala's planted area for macadamia nuts during 2001 is estimated at 3,760 hectares, of which 1,610 hectares were harvested. Planted area for 2002 is expected to increase to 3,875 hectares as new trees are planted. Harvested area is expected to increase to 1,690 hectares as young trees begin bearing fruit. Planted area and harvested area vary since many plantations are not yet in production due to new trees planted.

Kenya

Macadamia nuts experienced an upsurge in production to 5,800 tons in 2001, due to improved weather conditions after the drought experienced in 1999/2000, marginal increases in bearing trees, and slight improvements in agronomic practices. There has also been modest expansion in the area planted and greater focus placed on protected cropping. The area under macadamia, presently estimated at 8,000 hectares, is expected to increase slowly. During the first six months of 2001, demand for planting material started picking up due to favorable rains in production areas.

South Africa

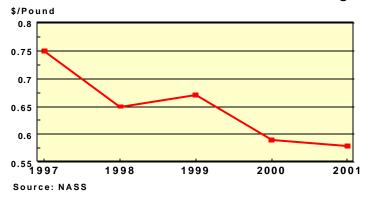
South African macadamia production in 2002 is expected to increase by 15 percent from the previous year to 11,000 tons. This is due to the alternating "on year" nature of the trees, favorable weather conditions, expanded area, and an increase in the number of bearing trees. The industry is expected to continue to expand in the next five years or so because of the establishment of rew production areas. Expansion includes the recent establishment of a 600-hectare macadamia orchard in Maclands of the Northern Province by Macadamia Industrial Development Corporation's subsidiary, Sapekoe. New production areas have also been established in Mpumalanga, around White River and Nelspruit, and Kwazlulu Natal in the South Coast.

United States

Hawaii's 2001-02 preliminary macadamia nut crop is estimated at 24,494 tons, up 8 percent from last season's crop, according to the Hawaii Agricultural Statistics Service (HASS). Total crop acreage is a little less, although there was a slight increase in harvested acreage. Weather during the past year had mixed effects on orchards, depending on location. South Kona orchards continued to experience the prolonged drought, reducing yields, while normally very wet areas had better than expected weather. Overall yields averaged 3.03 pounds per acre, 210 pounds above last year. The preliminary farm price for net, wet inshell macadamia nuts averaged 58.0 cents per pound, down 1.0 cent from the 2000/01 average. Farm prices have not been this low since the 1978-79-crop season. The farm value of macadamia nuts totaled \$31.3 million, up 6 percent from last season. Ongoing foreign competition continued to put downward pressure on the prices received by Hawaii's growers.

Total acreage in crop dropped 400 hectares from the previous year to 7,284 hectares, the lowest total since 1984/85. Harvested area increased by 40.5 hectares totaling 7,203 hectares. Some growers have replanted other crops. The statewide estimate of macadamia nut trees totaled 1.3 million, of which virtually all were 6 years and older. For the first time since 1946, most of the total area is harvested area.

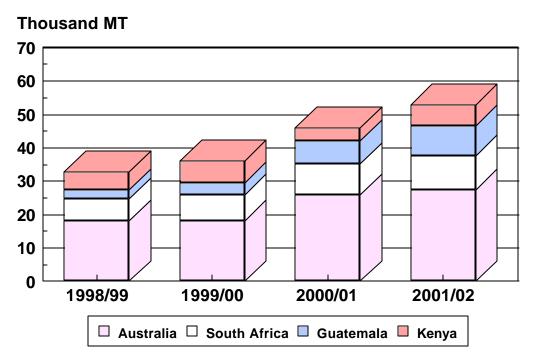
U.S. Macadamia Farm Price is Falling



GLOBAL TRADE

Total world exports are expected to reach 58,952 tons in 2001. This is a 16 percent increase from 2000 and a 39 percent increase from 1999. Approximately 40 percent of the world's exports in 2001 originate from Australia. All major producing countries are expected to increase their exports, with Kenya and Guatemala showing the largest percentage increase compared to last year.

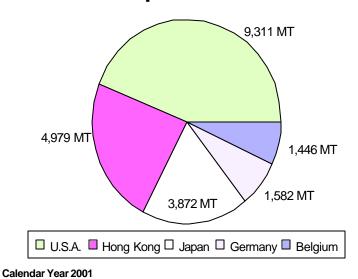
Top Macadamia Nut Exporters



Australia

Total macadamia nut exports are expected to reach 27,300 tons in 2001/02, up 5 percent from last year. Low domestic prices and a weak Australian dollar have kept exports high during a period of average production. Industry sources have described export demand as high and are concerned that supply is not adequate to fully service export markets. While the three largest export markets continue to be the United States, Hong Kong, and Japan, their share of total exports fell for the second year in a row from 68 percent in calendar year 2000, to 66 percent during the period March to November 2001. This is in line with industry efforts to continue diversifying export market opportunities away from the larger markets such as the United States. Although export volumes to many smaller markets decreased, markets where Australian industry has previously been active in promotion (such as Germany) increased in volume. Exports to the United States for the period March to February 2001/02 fell to 5,478 tons, compared to the 8,282 tons reached in the same period of the previous year. Lower stocks and increased penetration in other countries such as Belgium contributed to this development.

Australian Exports of Macadamias



Guatemala

Macadamia nut exports for calendar year 2001 reached 9,000 tons, a 22-percent increase from the previous year. During that same year, 25 percent of exports were on a shelled-kernel basis and 75 percent were as a finished good product. The United States continues to be Guatemala's largest export market, reaching 4,500 tons in 2001. Exports in calendar year 2002 are forecast to once again increase to 9,500 tons. The average macadamia kernel export price during 2001 was between \$2.80 and \$2.90 per pound. In 2002, the average price is expected to remain steady at the \$2.80 per pound level. According to the two exporting companies, their marketing efforts for the next five years will be to increase exports, especially to their strongest market, the United States. Producers are receiving technical assistance from both exporting companies in order to improve the Guatemalan macadamia nut quality.

Kenya

Total macadamia nut exports are expected to reach 6,052 tons in 2001/02, up 54 percent from last year. Japan, Germany, and the United States are Kenya's biggest export markets for macadamia nuts, with Japan taking in almost 70 percent of the exports. Exports to Japan are expected to go even higher during the year 2002. Due to attractive terms of payments and non-demanding production conditions of the macadamia tree, it is very likely that production will continue to rise.

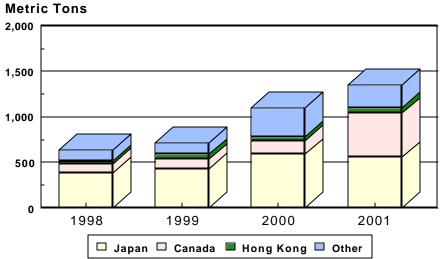
South Africa

Macadamia nut exports for calendar year 2001 reached 10,400 tons, a 13-percent increase from the previous year. The United States and Europe continue to be South Africa's largest export market. Exports in calendar year 2002 are forecast to once again increase to 11,400 tons. The average macadamia kernel export price during 2001 was between \$1.05 and \$1.10 per pound. In 2002, the average price is expected to remain steady at the \$1.10 per pound level. The industry exports about 90 percent of its total production.

United States

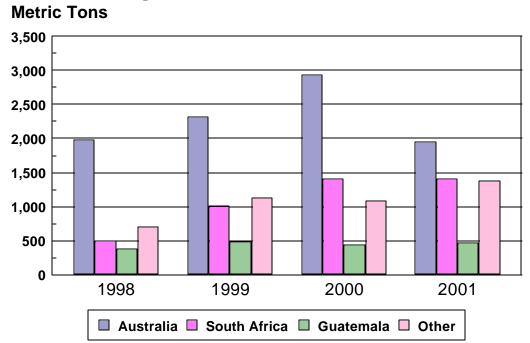
Total macadamia nut exports are expected to reach 4,300 tons in 2001/02, up 43 percent from last year. Japan, Canada, and Korea are the United States three largest export markets for macadamia nuts. Japan is still the largest single country market, purchasing almost 42 percent of U.S. macadamia exports. The United States exports mostly prepared or preserved macadamias. With the exception of Hong Kong and Taiwan, Asian markets are doing well compared to last year. U.S. exports of macadamia nuts to Korea, Singapore, China, and the Philippines have all increased. Sales to Canada, the United States second largest market increased 224 percent from the previous year, reaching 482 tons. However, sales to other important markets, including the Netherlands, decreased.





Total macadamia nut imports are forecast to decrease slightly to 23,875 tons, due to increased production in the United States. Other macadamia producers are slowly expanding production for export to the United States, the world's largest macadamia consumer. Rising U.S. consumer income and spending have been a big factor in soaking up some of the excess world supplies. Additionally, U.S. food processors report difficulties in procuring a steady 12-month supply from Hawaii. The majority of macadamia imports are bulk and industrial product intended for processing.

U.S. Imports of Macadamia Nuts



Source: U.S. Census Bureau

CONSUMPTION AND MARKETING

Consumption for selected countries (Australia, Costa Rica, Guatemala, Kenya, South Africa, and the United States) is expected to reach 54,608 in 2001, up slightly from the previous year. Increases in domestic consumption are found in Australia, Costa Rica, Guatemala, and the United States.

Australia

Domestic consumption data does not exist in Australia. Some industry representatives contend that domestic consumption is about 5,000 tons and is relatively stable. However, many experts believe that this figure is too low and put domestic consumption at around 9,000 tons for 2001/02. The vast majority of macadamia nuts consumed domestically are in the form of kernels or in value-added products. Increasing amounts of kernels are used in restaurants and the food service industry. Horticulture Australia Ltd. (HAL) has worked to increase macadamia usage in home and restaurant recipes.

Traditionally, the two major horticultural organizations in Australia have been the Horticultural Research and Development Corporation (HRDC) and the Australian Horticultural Corporation (AHC). The HRDC was responsible for research and development and the AHC was responsible for promotional activities. Both organizations were funded by levies paid by growers and received pro-rata government funding for specific purposes. HAL is the new organization that replaced the AHC and HRDC on February 1, 2001. The focus of the new company is the marketing and promotion of horticultural products in both domestic and export markets as well as promoting the uptake and commercialization of new technology.

Guatemala

Macadamia consumption in Guatemala continues to be at a low level because of high market prices, low purchasing power of most Guatemalans, and the lack of consumer awareness. Most Guatemalans are not familiar with macadamia nuts and their uses, but this is starting to change. The brand John Macadam has found acceptance for macadamia by-products such as oils, confectioneries, processed nuts, and especially cosmetics, creating a niche market for macadamias. Local retail prices for macadamia are around \$9.00 per pound. In 2001, Guatemala consumed 360 tons of macadamia nuts. In 2002, local consumption is expected to remain steady due to stalled consumption patterns of higher valued items in response to the difficult economic situation.

Plantaciones Nuez del Pacifico, which markets under the John Macadam brand, has begun to penetrate new niche markets with different macadamia by-products. There is a relatively small but growing up-scale end of the food and small market industry in Guatemala. The increase in quality hotels and tourism will add the local consumption of macadamia nuts and further processed products.

Kenya

Local consumption is minimal as most of the processed macadamia kernels leave the country for overseas markets. It is assumed that the balance between exports and production is consumed domestically and in neighboring countries. Domestic consumption is estimated at about 40 tons of processed kernels. The sector suffers from lack of awareness and the prohibitive prices, due to the high processing costs.

The marketing sector has one sole processor, the Kenya Nut Company (KNC), following the closure of the Kenya Farm Nut Company about two years ago. That company used to export its processed kernels to the United States, a market that the KNC seems to be following very closely. As a marketing tool, the KNC has branded its macadamia (Out of Africa) and is aggressively promoting them in both the international and local markets.

South Africa

Local consumption is minimal as most of the macadamia nuts are destined for overseas markets. South Africa exports about 90 percent of its total production. It is assumed that the balance between exports and production is consumed domestically. Domestic consumption is estimated at about 500 tons, unchanged

from the previous year. Macadamia consumption in South Africa continues to be at a low level because of high market prices and low purchasing power of most of its people, and the lack of consumer awareness.

The United States

The United States is the world's largest consumer of macadamias. In 2001/02, domestic consumption is expected to reach 44,069 tons, up slightly from the previous year. This number is expected to grow. Macadamia producers around the world are slowly expanding production for export to the United States. Rising U.S. consumer income and spending have been a big factor in soaking up some of the excess world supplies. Additionally, U.S. food processors report difficulties in procuring a steady year-round supply from Hawaii. The majority of macadamia imports are bulk and industrial product intended for processing.

The Attaché Report search engine contains reports on the macadamia industry for several countries including Australia, Guatemala, Kenya, and South Africa. For more information on production and trade, contact Erik Hansen at 202-720-0875. Also, please visit the tree nuts commodity page: http://www.fas.usda.gov/htp/horticulture/nuts.html for the latest information on almonds, walnuts, pistachios, hazelnuts, pecans, and macadamia nuts.

MACADAMIAS: Production, Supply, and Distribution in Selected Countries

| Country/ Marketing Year 1/ | Beginning Stocks | Production | Imports | Total Supply | Exports | Domestic Consumption | Ending Stocks | | |
|-------------------------------|-----------------------------|------------|---------|-----------------|---------|-------------------------|------------------|--|--|
| | Metric Tons, In-Shell Basis | | | | | | | | |
| Australia | | | | | | | | | |
| 1999/2000 | 4,100 | 34,000 | 0 | 38,100 | 18,100 | 16,000 | 4,000 | | |
| 2000/2001 | 4,000 | 34,300 | 0 | 38,300 | 26,000 | 9,000 | 3,300 | | |
| 2001/2002 | 3,300 | 37,000 | 0 | 40,300 | 27,300 | 9,250 | 3,750 | | |
| 2002/2003 F | 3,750 | 38,850 | 0 | 42,600 | 28,850 | 9,500 | 4,250 | | |
| Costa Rica | | | | | | | | | |
| 1999/2000 | 530 | 2,000 | 0 | 2,530 | 1,681 | 300 | 549 | | |
| 2000/2001 | 549 | 2,000 | 0 | 2,549 | 1,900 | 330 | 319 | | |
| 2001/2002 | 319 | 2,100 | 0 | 2,419 | 1,900 | 340 | 179 | | |
| 2002/2003 F | NA | NA | NA | NA | NA | NA | NA | | |
| Guatemala | | | | | | | | | |
| 1999/2000 | 110 | 4,000 | 0 | 4,110 | 3,800 | 200 | 110 | | |
| 2000/2001 | 110 | 7,200 | 0 | 7,310 | 7,000 | 200 | 110 | | |
| 2001/2002 | 110 | 9,360 | 0 | 9,470 | 9,000 | 360 | 110 | | |
| 2002/2003 F | 110 | 9,800 | 0 | 9,910 | 9,500 | 360 | 50 | | |
| Kenya | | | | | | | | | |
| 1999/2000 | 700 | 6,000 | 0 | 6,700 | 6,429 | 61 | 210 | | |
| 2000/2001 | 210 | 4,900 | 0 | 5,110 | 3,924 | 156 | 1,030 | | |
| 2001/2002 | 1,030 | 5,800 | 0 | 6,830 | 6,052 | 89 | 689 | | |
| 2002/2003 F | 689 | 6,050 | 0 | 6,739 | 6,339 | 100 | 300 | | |
| South Africa | | | | | | | | | |
| 1999/2000 | 530 | 8,000 | 0 | 8,530 | 7,710 | 520 | 300 | | |
| 2000/2001 | 300 | 9,700 | 0 | 10,000 | 9,200 | 500 | 300 | | |
| 2001/2002 | 300 | 11,000 | 0 | 11,300 | 10,400 | 500 | 400 | | |
| 2002/2003 F | 400 | 12,000 | 0 | 12,400 | 11,400 | 600 | 400 | | |
| United States 2/3/4/ | | | | | | | | | |
| 1999/2000 | 0 | 25,628 | 23,286 | 48,914 | 4,710 | 44,204 | 0 | | |
| 2000/2001 | 0 | 22,680 | 24,100 | 46,780 | 3,000 | 43,780 | 0 | | |
| 2001/2002 | 0 | 24,494 | 23,875 | 48,369 | 4,300 | 44,069 | 0 | | |
| 2002/2003 F | NA | NA | NA | NA | NA | NA | NA | | |
| Total | | | | | | | | | |
| 1999/2000 | 5,970 | 79,628 | 23,286 | 108,884 | 42,430 | 61,285 | 5,169 | | |
| 2000/2001 | 5,169 | 80,480 | 24,100 | 110,049 | 51,024 | 53,966 | 5,059 | | |
| 2001/2002 | 5,059 | 87,054 | 23,875 | 118,688 | 58,952 | 54,608 | 5,128 | | |
| 2002/2003 F | NA | NA | NA | NA NA | NA | NA NA | NA | | |

^{1/} Marketing Years: July-June for the United States; March-February for Australia, Brazil, and Kenya; January-December for Costa Rica, Guatemala, and South Africa.

SOURCES: FAS Agricultural Attaché Reports, Bureau of Census, NASS/USDA, and HASS

^{2/} U.S. exports and imports come from the Bureau of the Census with forecasts by USDA/Foreign Agricultural Service (FAS) with shelling ratio averages of .224, .227, and .228 were for 1999/2000, 2000/2001, and 2001/02 respectively, based on averages of the past three years. Shelling ratios originate with the Hawaii Agricultural Statistics Service (HASS).

^{3/} U.S. exports include only prepared and preserved macadamia nuts. The National Agricultural Statistics Service (NASS) in Hawaii indicates that few U.S. exports are shelled or in-shell macadamias.

^{4/} Domestic consumption derived from production and exports

 $F = Forecas\,t$

U.S. Exports of Prepared and Preserved Macadamia Nuts 1/

1996/1997 1997/1998 1998/1999 1999/2000 2000/2001 (Metric Tons, In-Shell Equivalent)

| Destination | | | | | |
|----------------------------|-------|-------|-------|-------|-------|
| Canada | 338 | 343 | 403 | 589 | 687 |
| China; Peoples Republic of | 0 | 35 | 18 | 116 | 44 |
| European Union | 206 | 148 | 230 | 205 | 322 |
| Hong Kong | 535 | 730 | 128 | 397 | 163 |
| Japan | 2,882 | 1,400 | 2,190 | 2,299 | 2,507 |
| Korea; Republic of | 193 | 239 | 199 | 219 | 229 |
| Lebanon | 9 | 13 | 4 | 0 | 0 |
| Norway | 22 | 9 | 9 | 13 | 0 |
| Philippines | 22 | 0 | 13 | 22 | 93 |
| Singapore | 35 | 4 | 9 | 58 | 115 |
| Switzerland | 48 | 100 | 0 | 0 | 0 |
| Taiwan | 285 | 217 | 119 | 210 | 189 |
| Other Countries | 17 | 5 | 59 | 234 | 277 |
| Total | 4,592 | 3,243 | 3,381 | 4,362 | 4,626 |

U.S. Imports of Prepared and Preserved Macadamia Nuts 1/ 1996/1997 1997/1998 1998/1999 1999/2000 2000/2001 (Metric Tons, In-Shell Equivalent)

| Total | 11,373 | 13,265 | 18,305 | 23,237 | 22,300 |
|----------------------------|--------|--------|--------|--------|--------|
| Other Countries | 109 | 120 | 43 | 227 | 286 |
| Zimbabwe | 127 | 0 | 146 | 107 | 163 |
| South Africa; Republic of | 1,654 | 1,248 | 3,593 | 3,978 | 7,070 |
| Malawi | 447 | 487 | 1,389 | 442 | 225 |
| Guatemala | 1,439 | 1,496 | 947 | 768 | 93 |
| El Salvador | 1,583 | 870 | 1,996 | 2,112 | 1,917 |
| Costa Rica | 1,421 | 1,713 | 739 | 1,196 | 1,079 |
| China; Peoples Republic of | 145 | 96 | 71 | 134 | 132 |
| Brazil | 461 | 687 | 549 | 670 | 1,683 |
| Australia | 3,987 | 6,548 | 8,832 | 13,603 | 9,652 |
| Destination | | | | | |

^{1/} Marketing Years, July-June

NOTE: Shelling ratios for macadamia nuts are from the Hawaii Agricultural Service (HASS) and are shelling ratio averages of .224, and .227 were for 1999/2000, and 2000/2001 respectively, based on averages of the past three years. Shelling ratios originate with the Hawaii Agricultural Statistics Service (HASS). Sources: U.S. Bureau of Census, HASS