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## Guatemala

## Tree Nuts

## Macadamia Nuts

## 2006

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**Report Highlights:**

Guatemala macadamia nut production increased 3 percent in 2005, despite the effects of Hurricane Stan in October and the weak international prices, which reduced incentives to producers. Production and exports are expected to remain stagnant in 2006.

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Includes PSD Changes: Yes  
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Guatemala [GT1]  
[GT]

Table of Contents

Executive Summary ..... 3

Production ..... 4

Consumption..... 5

Trade..... 6

Stocks ..... 6

Policy ..... 7

Marketing ..... 7

**Executive Summary**

Guatemala's macadamia nut production for 2005 increased to 6,899 MT (wet-in-shell basis). This represents a 3% increase over the previous year, despite a weakening market and the damage caused by Hurricane Stan late in 2005. Exports rose 5 percent over 2005. However, production and exports are expected to stagnate in 2006 as the industry foresees a decreasing trend in the market overall, as worldwide consumption is decreasing.

In the macadamia industry the diversification trend to finished products such as oils, cosmetics and confectionaries continues but at a slow pace. Since 2004, consumption has remained steady and the trend is expected to hold for 2006. A local liquor company is also trying to produce an alcoholic beverage from macadamia nuts, but it is in the R & D stage and is using less than 10 metric tons for its research.

|                      |                                   |                                      |                                   |                                       |                                   |                                    |
|----------------------|-----------------------------------|--------------------------------------|-----------------------------------|---------------------------------------|-----------------------------------|------------------------------------|
| PSD Table            |                                   |                                      |                                   |                                       |                                   |                                    |
| Country              | Guatemala                         |                                      |                                   |                                       |                                   |                                    |
| Commodity            | Macadamia                         | In Shell                             | Basis (MT)                        | (HA) 1000 TREES                       |                                   |                                    |
|                      | 2004<br>USDA<br>Official<br>[Old] | Revised<br>Post<br>Estimate<br>[New] | 2005<br>USDA<br>Official<br>[Old] | Estimate<br>Post<br>Estimate<br>[New] | 2006<br>USDA<br>Official<br>[Old] | Forecast<br>Post Estimate<br>[New] |
| Market Year Begin    |                                   | Jan-04                               |                                   | Jan-05                                |                                   | Jan-06                             |
| Area Planted         | 4105                              | 4313                                 | 4249                              | 4463                                  | 0                                 | 4463                               |
| Area Harvested       | 1860                              | 2150                                 | 2274                              | 2389                                  | 0                                 | 2389                               |
| Bearing Trees        | 291                               | 367                                  | 388                               | 408                                   | 0                                 | 408                                |
| Non-Bearing Trees    | 380                               | 380                                  | 380                               | 380                                   | 0                                 | 323                                |
| Total Trees          | 671                               | 747                                  | 768                               | 788                                   | 0                                 | 731                                |
| Beginning Stocks     | 80                                | 50                                   | 50                                | 19                                    | 0                                 | 19                                 |
| Production           | 10780                             | 6668                                 | 6983                              | 6899                                  | 0                                 | 6899                               |
| Imports              | 0                                 | 0                                    | 0                                 | 0                                     | 0                                 | 0                                  |
| TOTAL SUPPLY         | 10860                             | 6718                                 | 7001                              | 6918                                  | 0                                 | 6918                               |
| Exports              | 10450                             | 6510                                 | 6817                              | 6844                                  | 0                                 | 6844                               |
| Domestic Consumption | 360                               | 189                                  | 360                               | 55                                    | 0                                 | 55                                 |
| Ending Stocks        | 50                                | 19                                   | 50                                | 19                                    | 0                                 | 19                                 |
| TOTAL DISTRIBUTION   | 10860                             | 6718                                 | 7001                              | 6918                                  | 0                                 | 6918                               |

## Production

Production in 2004 was highly overestimated by 20%. The average annual increase in macadamia production has been 5% for the last 3 years. The amount of non-bearing trees has been steady at 380 since 2004, corresponding to the last plantation, which is expected to enter production in 2007.

The Guatemalan nut crop for 2005 is estimated at 6,899 MT (wet-in-shell basis). In 2006, production is forecast to stay steady at 6,899 MT (wet-in-shell basis). The conversion factor utilized to convert from wet-in-shell basis to shelled kernel is 19 percent. The two primary factors affecting macadamia production are the effects of Hurricane Stan and a continued weak international market for macadamia.

In October 2005, Hurricane Stan caused extensive flooding and landslides along the southern and western parts of Guatemala. This damage adversely affected the macadamia industry, destroying at least 15% of the newly planted trees and lowering yields. Average yields for 2005 were estimated at 2.9 MT/Hectare, 10% lower than the previous year's average. The average output per bearing tree in 2005 was 16.9 lbs.

In 2006, average yields are expected to remain steady. Increases in yields are not expected in the next couple of years because weak demand for macadamia and lower international prices have reduced incentives to invest in production inputs (fertilizer) and hand harvesting.

Guatemala's planted area for macadamia nuts during 2005 was estimated at 4,463 hectares, of which 2,389 hectares were harvested. Planted area for 2006 is expected to remain unchanged, though the potential area to be harvested will be at least 2,508 HA as young trees begin bearing fruit. There are over 350 macadamia producers in the country, ranging from small to large plantations. The majority of macadamia plantations in Guatemala are at intermediate elevations along the Pacific slope, in the departments of Sacatepequez, San Marcos, Quetzaltenango, Suchitepequez, Santa Rosa, Huehuetenango, Solola, Alta Verapaz and some in Quiche. Guatemalan macadamia nuts are harvested throughout the year, but peak months are May, June, July and August. Flowering begins between late August and early September but most flowering occurs during the months of October, November and December.

There is only one major producer/processor/exporter company in Guatemala, Agropecuaria Patzulín, S.A. Patzulín pioneered the macadamia nut industry in Guatemala and all of Latin America. Their first orchards were planted in 1972 with grafted Hawaiian varieties. The company has more than 325,000 grafted macadamia nut trees growing on 4,550 acres at three farms located on Guatemala's South Coast highlands. In addition to the company's own production, the processing plant receives wet-in-shell nuts from eighty independent growers. The processing plant and burning boiler at Rio Bravo are being continuously upgraded, recently acquiring their ISO 9001-2000 certification. The processing plant supplies 90% of the export market.

In 2005, the Multiexport Company, which had been a major supplier to Hong Kong (10% of exports) went bankrupt.

Most macadamia trees are planted among other crops, such as bananas, plantains, or beans. According to producers most trees are now being grown as shade trees for coffee plants.

Macadamia processors divide the shelled nuts according to their size and appearance. The initial grading of kernels for size and color is done by machine, with a final classification conducted by hand. A classification table follows:

- Style 1 - large whole kernels
- Style 2 - 90% large kernels 10% halves
- Style 3 - 50% whole kernels 50% halves
- Style 4 - halves
- Style 5 - large to medium nut pieces
- Style 6 - medium to small nut pieces
- Style 7 - small nut pieces
- Style 8 - powder

## Consumption

Macadamia consumption in Guatemala continues to be at a low level because of high retail prices combined with the low purchasing power of most Guatemalans, and a lack of consumer awareness. Most Guatemalans are not familiar with macadamia nuts and their uses. Producers are starting to find some acceptance for macadamia by-products such as oils, confectioneries, processed nuts and especially cosmetics, creating a niche market for macadamia. However ready-to-eat kernels were forced off the shelves last year due to low sales. Local retail prices for macadamia are around \$9.00 per pound, retail pack. In 2005, Guatemala consumed 55 MT of wet-in-shell macadamia nuts, 30% of what was consumed in 2004.

## Trade

|                     |                           |        |             |
|---------------------|---------------------------|--------|-------------|
| Export Trade Matrix |                           |        |             |
| Country             | Guatemala                 |        |             |
| Commodity           | Macadamia, In shell Basis |        |             |
| Time period         | Jan-Dec                   | Units: | Metric Tons |
| Exports for:        | 2004                      |        | 2005        |
| U.S.                | 5200                      | U.S.   | 4487        |
| Others              |                           | Others |             |
| Belgium             | 0                         |        | 1400        |
| Hong Kong           | 600                       |        | 870         |
| Netherlands         | 500                       |        | 80          |
| Costa Rica          | 300                       |        | 4           |
| Japan               | 130                       |        | 2           |
|                     |                           |        |             |
| Total for Others    | 1530                      |        | 2356        |
| Others not Listed   | 87                        |        | 1           |
| Grand Total         | 6817                      |        | 6844        |

Macadamia nut exports for calendar year 2005 increased to 6,844 MT (wet-in-shell basis), a five percent increase from 2004 exports of 6,510 MT. In 2006, total exports are forecast to remain steady. Guatemala's macadamia nuts are exported at 1.0 to 1.5 percent humidity. Macadamia kernels are vacuum packed in 25 pounds bags for export.

In 2005, macadamia kernels were mainly exported to the U.S. and the rest was distributed between Belgium, Hong Kong, and the Netherlands. Japan was not a major market in 2005 as it had been in 2004.

The average macadamia kernel FOB export price during 2005 was between US\$ 4.50/lb and US\$ 5.00/lb. In 2006, the average price is expected to drop to US\$ 4.00. According to the major exporting company, their market efforts for the next five years will concentrate on maintaining quality for their existing markets, especially their strongest market, the United States. The industry will try to reach new Asian markets, as U.S. and European markets seem to have full warehouses for the first nine months.

The macadamia industry is experiencing difficulties in selling 2006 production. In previous years, exports have been sold on quota contracts, mostly presold by the end of January. For 2006, the main buyers are not planning to execute contracts until September.

## Stocks

Guatemala does not hold large volumes of macadamia nuts in stock because most are exported immediately. In Guatemala the exporter owns macadamia stock.

**Policy**

The Guatemalan Government has no policies of subsidies or assistance to producers or exporters. ANACAFE, the Guatemalan coffee association, encourages coffee producers to utilize macadamia trees as shade for coffee plants to help the environment and at the same time help farmers to diversify their agricultural practices and sources of income. ANACAFE and Patzulín have provided some technical assistance.

**Marketing**

The market is experimenting with other finished goods such as oils, liquors and cosmetics, but at this time most of the product is being shipped as ready-to-eat kernels.

Locally there are now three different brands on the supermarket shelves, but supermarket executives commented that the product rotation is still slow in comparison to other snack nuts.