



Foreign Agricultural Service

GAIN Report

Global Agriculture Information Network

Required Report - public distribution

Date: 1/24/2001

GAIN Report #AS1005

Australia

Tree Nuts

Annual

2001

Approved by:

Randolph H. Zeitner

U.S. Embassy

Prepared by:

Mike Darby

Report Highlights:

The 2001/2002 macadamia crop is forecast at 35,500 MT (nut-in-shell), an increase of 22 percent on the previous year. Exports for the period March to November 2000 increased 12 percent when compared to the total for the previous year.

Includes PSD changes: Yes
Includes Trade Matrix: Yes
Annual Report
Canberra [AS1], AS

Executive Summary	1
Macadamia Nuts, Shelled	2
Production	2
General	2
Crop Area	3
Yield	4
Consumption	4
General	4
Trade	5
General	5
Stocks	6
Policy	6
General	6
Marketing	7
Industry Structure	7

Executive Summary

The 2001/02 crop is forecast at 35,500 MT on a nut-in-shell (NIS) basis, an increase of 22 percent on the previous year. The crop has experienced a return to normal weather conditions in its early stages and industry is anticipating increased production as a result.

According to industry sources, surveys have identified around 3.0 million trees planted prior to 1995 are now in commercial production. Since 1995, around 200 thousand trees have been planted per annum leaving the industry with around 800 thousand trees not yet producing. Industry sources believe that very few older trees in production have been removed.

Industry estimates area at around 14,000 ha for 2000/2001. However, post puts the total figure at 14,285 ha based on an average planting density of 266 trees per hectare. This figure includes 11,278 ha currently in production and 3,007 ha of trees which, although planted, are not yet producing.

Post has reduced domestic consumption estimates. Industry representatives now believe that domestic consumption is in the order of 5,000 MT NIS. Post believes this figure is too low but has revised the consumption figure to 8,200 MT NIS for 2000/01. This is down sharply from previous estimates.

The price received for macadamia nuts by growers remained low through 2000/01 at around \$A2.20/kg NIS, nine percent lower than the previous year. Industry sources indicate that prices have begun to increase for exported product.

Increasing exports and decreasing production in 2000/2001 have seen ending stocks fall dramatically and are estimated by post at less than two percent of total production.

Horticulture Australia Ltd. (HAL) is the new organization that replaced the AHC and HRDC on January 1, 2001. HAL has been established under corporations law as a not-for-personal-profit company in accordance with the Memorandum of Understanding (MOU) signed by 26 industry organizations. The focus of the new company will be to continue marketing and promoting horticultural products in both domestic and export markets as well as exploiting opportunities for uptake and commercialization of new technology.

Macadamia Nuts, Shelled

Production

PSD Table						
Country	Australia					
Commodity	Macadamia, Inshell Basis				(HA)(1000 TREES)(MT)	
	Revised	1999	Preliminary	2000	Forecast	2001
	Old	New	Old	New	Old	New
Market Year Begin		03/2000		03/2001		03/2002
Area Planted	13255	14285	14580	15038	0	15789
Area Harvested	10120	11278	11130	12030	0	12787
Bearing Trees	2695	3000	2970	3200	0	3400
Non-Bearing Trees	880	800	970	800	0	800
Total Trees	3575	3800	3940	4000	0	4200
Beginning Stocks	4100	4100	4000	500	4000	2000
Production	34000	29100	39100	35500	0	37000
Imports	0	0	0	0	0	0
TOTAL SUPPLY	38100	33200	43100	36000	4000	39000
Exports	18100	24500	21100	25500	0	27000
Domestic Consumption	16000	8200	18000	8500	0	8500
Ending Stocks	4000	500	4000	2000	0	3500
TOTAL DISTRIBUTION	38100	33200	43100	36000	0	39000

General

Post puts 2000/2001 production at 29,100 MT on a nut-in-shell (NIS) basis, in line with industry reports. This crop was smaller than initially forecast due to wetter than average weather conditions. Areas in Northern NSW that produce macadamia's received well over 3,200 mm of rainfall, far above the annual average of 1,700 mm. This created widespread disease and fungus problems which subsequently reduced yield and quality.

The 2001/02 crop is forecast at 35,500 MT NIS, an increase of 22 percent on the previous year. The crop has experienced a return to normal weather conditions in its early stages and industry is anticipating increased production as a result.

The 2002/03 crop is forecast at 37,000 MT NIS, representing a four percent increase in production on the previous year. This increase is driven primarily from new plantings coming into production and to a lesser extent from a general increase in yields.

The macadamia nut is indigenous to Australia and is sometimes known as the "Australian Bush Nut", the "Queensland Nut", or the "Bauple Nut". The Proteaceae (macadamia) family grow in subtropical climates and require precise climatic conditions. Macadamia integriflora, the main commercial species accounting for about 98 percent of total production, naturally occurs within 15 miles of the coast from lower Beechmont to Mt.

Bauple, Queensland. *Macadamia tetraphylla* is native mainly to New South Wales, it has a rougher shell, and is adapted to more temperate conditions. Many hybrids have been developed.

Commercial production has traditionally been centered in north-eastern New South Wales with some production in south-eastern Queensland. However, in recent times large areas have been planted in south-eastern Queensland which now accounts for around 40 percent of production. NSW produces over half Australia's production with some small plantings existing in Western Australia. *Macadamia* trees require rich soils and high annual rainfall or irrigation to produce commercial quantities of nuts. The macadamia nut is harvested as nuts mature and fall during autumn and winter (March to September).

It is estimated that about 950 farms produce macadamia nuts commercially in Australia although this includes "lifestylers" who produce nuts in a non-commercial fashion. Commercial producers are believed to be numbered at around 800. Around 730 growers (accounting for around 90 percent of production) are members of the Australian Macadamia Society Ltd (AMS) which is the peak industry body. The average size of farms is about 40 ha and is believed by industry sources to be increasing slowly.

Crop Area

According to industry sources, surveys have identified around 3.0 million trees that were planted prior to 1995 and are now in commercial production. Since then around 200 thousand trees have been planted per annum leaving the industry with around 800 thousand trees not yet producing. Industry sources believe that very few of the older trees in production have been removed.

Industry estimates planted area at around 14,000 ha for 2000/2001. However, Post puts the total figure at 14,285 ha based on an historical average planting density of 266 trees per hectare. This figure includes 11,278 ha currently in production and 3,007 ha of trees which, although planted, are not yet producing.

Industry sources indicate that the majority of new plantings are large and are mostly occurring in Queensland rather than NSW, continuing the trend of increasing Queensland's share of total production. Plantings in the Bundaberg area of Queensland in recent times have totaled more than 300,000 trees. Individual plantings in this area are reported to comprise between 40,000 and 100,000 trees per farm (100-300 ha in size). The first of these are believed to have commenced production in 2000. New plantings are showing an increasing trend away from northern NSW towards cheaper land in Queensland where macadamia nuts can be produced on a larger scale.

The AMS reports that planting density has changed dramatically in the Australian industry over the last 25 years. During the 1970's planting density was around 175 trees per hectare. Planting density increased to over 300 trees per hectare in the late 1980's due to efforts to encourage trees to bear earlier in the season. However problems associated with over crowding has seen the planting density decrease to the current level of around 275 trees per hectare. Post puts the overall planting density at 266 trees per hectare.

According to AMS estimates, the industry employs about 1600 people, with 1000 being engaged in nut production, harvesting and consultancy, and the remainder in processing and marketing.

Yield

The AMS reports that mature trees will yield between 20 to 30 kg NIS per tree, which is similar to Hawaiian production. However, average Australian yields are reported to be around 15-20 kg/tree NIS. Most Hawaiian trees are already mature and thus achieve a higher yield per tree than in Australia. Nearly half of the macadamia trees planted in Australia are under 10 years and have not reached full production. Post estimates average production per producing tree harvested for 2000/01 was 9.7kg. This is expected to increase to 11.01 for 2001/02 with a return to normal weather conditions.

Yields are believed to be lower in Australia for a combination of reasons. While the macadamia tree is an Australian native, the varieties selected and grown in Hawaii are not particularly adapted to Australian conditions. These varieties were reintroduced to Australia where they still dominate the older plantations. Australian varieties are common in all newer plantations, i.e. planted in the last 10 years.

New hybrids and selections are introduced as trials are conducted. Local and imported species are being evaluated for yield, kernel recovery, percentage of first grade kernels, and kernel size. These trials aim to select genetic material which is better suited to Australian environmental conditions. Some growers are grafting new varieties on to old rootstock, which halves the time out of production, i.e. normally new trees take around five years to bear, this method means that the reworked older trees take around two years to bear.

Another factor contributing to the lower yields in Australia, and in many other countries outside Hawaii, is the harsher environment. Australia has larger diurnal and seasonal variations in temperature compared with the mild, equitable climate of Hawaii. Australian trees are also subject to greater variations in moisture stress.

Post expects yields to increase slowly over the longer term as the average age of trees increases and management practices continue to improve.

Consumption

General

Post has previously put domestic consumption in the order of 16,000 MT NIS. Industry representatives now believe that domestic consumption is in the order of 5,000 MT NIS. Post believes this figure is too low but has revised the consumption figure downwards to 8,200 MT NIS for 2000/01.

Industry sources acknowledge the lack of consumption information for macadamias within Australia. Traditionally, industry experts have subtracted exports from production and have termed the residual value "domestic disappearance". However, sources now indicate that the industry is in the early stages of organizing to collect domestic consumption information on a regular basis.

The vast majority of macadamias 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. The AHC has worked to increase macadamia usage in home and restaurant recipes.

Price

The price receive for macadamia nuts by growers remained low through 2000/01 at around \$A2.20/kg NIS, nine percent lower than the previous year although industry sources indicate that prices have begun to increase for exported product. Whether this increase continues remains to be seen.

Trade

Export Trade Matrix			
Country	Australia		
Commodity	Macadamia, Inshell Basis		
Time period	Mar - Feb	Units:	MT
Exports for:	1999		2000
U.S.	8396	U.S.	8282
Others		Others	
Japan	3430	Hong Kong	4874
Hong Kong	3211	Japan	3319
Belgium	2406	Germany	1456
China	1500	Belgium	1008
Germany	949	The Netherlands	383
The Netherlands	408	Canada	349
Rep. of Korea	307	Taiwan	153
Taiwan	227	Spain	93
Singapore	196	Singapore	93
Canada	180	Rep. of Korea	92
Total for Others	12814		11820
Others not Listed	567		4215
Grand Total	21777		24317

Note: 2000 figures are Mar - Nov 2000 only.

General

Total exports for the period March to November 2000 reached 24,317 MT (NIS), an increase of 12 percent when compared to the total for the previous year. Low domestic prices and a low \$A has allowed exports to increase significantly during a period of falling production. As a result, carry over stocks are described by industry sources as "virtually nil".

While the three largest export markets continue to be the US, Hong Kong and Japan, their share of total exports fell slightly from 70 percent in CY 1999, to 68 percent during the period March to November 2000. This is in line with industry efforts to continue diversifying export market opportunities away from the larger markets such as the US. Although export volumes to many smaller markets decreased, markets where the Australian industry has previously been active in promotion (such as Germany) increased in volume.

Industry sources say that the Chinese market has potential for future growth. Although Australia has previously exported significant quantities to this destination, this market is now providing more lucrative trade. Furthermore, an increasing percentage of the trade with China is believed to be for consumption rather than re-export.

Australian import tariffs for macadamia kernels and NIS are zero. The Australian Bureau of Statistics does not report separate macadamia import figures. Import figures are aggregated with other nuts.

Stocks

Increasing exports and decreasing production in 2000/2001 has seen ending stocks fall dramatically and are estimated by post at less than two percent of total production.

Policy

General

The US ITC conducted an investigation under Section 332(g) of the Tariff Act of 1930 into the competitive factors affecting the US macadamia industry during 1998. This included a study into competition from the Australian industry. The Australian industry appeared at hearings in Washington DC and Hawaii, and also provided written submissions to the ITC. The findings of the report indicate that falling world prices have resulted from a rapid increase in supply combined with softer demand from European and Asian customers. The decrease in Asian demand is reflected in decreased exports to some Asian markets and a decrease in Asian tourists to Hawaii.

The AMS has established a task force made up of industry representatives. This task force is charged with developing systems that enable growers to be paid promptly after the delivery of their crop. Currently producers and processors can be paid up to one year after the crop is harvested. The AMS believes that this distorts farm and processor investment decisions.

Marketing

Industry Structure

Until recently 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 such as research and development to a maximum of 0.5 percent of gross value of production. In 1998/99, the total amount of government funding was A\$15.2 million.

The Australian Federal Government reviewed the legislation pertaining to these bodies and with industry support has merged both organizations into one.

Horticulture Australia Ltd. (HAL) is the new organization that replaced the AHC and HRDC on January 1, 2001. HAL has been established under corporations law as a not-for-personal-profit company in accordance with the Memorandum of Understanding (MOU) signed by 26 industry organizations. The focus of the new company will be to continue marketing and promoting horticultural products in both domestic and export markets as well as exploiting opportunities for uptake and commercialization of new technology.

The Government of Australia (GOA) does not provide subsidies for macadamia nut exports. The GOA provides dollar for dollar funding for research and development activities relating to the macadamia nut industry.

There are around 12 commercial processors of macadamia nuts in Australia with most of the processing undertaken by six major companies. Five of these companies do their own marketing.

The two largest processing companies account for around 50 percent of kernel production. The majority of kernel production is exported, mainly as bulk raw kernel.