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Kenya

Tree Nuts

Annual

2002

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Report Highlights:
Kenyan macadamia production increased from 5,800 tons in 2001 to 6,400 ton (wet in shell basis) in 2002. There was a 10 percent in exports earning the country about kshs 388 million. Both production and exports are forecast to increase during 2003. Cashewnuts production is estimated at 20,000 ton wet in shell basis and earns the country about kshs 375 milion. Over 90 percent of the cashenuts are exported to India raw. The cashewnut industry has been characterized by poor management framework due to various reasons ranging from infrastructural to poor processing and lack of a proper marketing framework

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Includes PSD changes: Yes
Includes Trade Matrix: Yes
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Executive Summary

In 2002 Kenyan macadamia production increased from 5,800 tons in 2001 to 6,400 mt tons (wet in shell basis) in 2002. There was a 10 percent increase in exports from 1005 tons in 2001 to about 1,108 tons processes kernels in 2002 earning the country about Kshs 387 million. Both production and exports are forecast to increase during the year 2003.

Cashewnuts fetch about kshs 375 million and contribute about 1 percent the value of total Kenya agricultural production. The industry has been characterized by poor management due to various reasons ranging from infra structural to poor processing and lack of a proper marketing framework. Low prices and lack of a proper market have been the most debilitating factors contributing to the decline in production, with farmers diversifying to other more farm enterprises.

Exchange rate: 1 USD = 78 KSHS

A) Macadamia Production In Kenya

Production

Macadamia production experienced an upsurge in production from 5,800 to 6,400 tons nuts in shell (NIS) in the year 2001 to 2002 respectively. A good crop is forecast for the year 2003 and 2004 (table 1). The increase in production is attributed to good weather conditions, stocks from the previous year, some increase in bearing trees and slight improvement of agronomic practices. Kenya Nut Company, the only processor, is planning on increasing the area under macadamia (purestand).

Table 1: Area, Tree and Nut Production
(Wet in shell basis)

	Dec 2002	Dec 2003	Dec 2004
	Actual	Preliminary	Forecast
Area Planted	8,000	8,000	8,100
Area harvested	6,805	6,810	6,810
Bearing trees	1,500,000	1,500,000	1,520,000
Non bearing trees	350,000	350,000	340,000
Total trees	1,850,000	1,850,000	1,860,000
Beginning stocks	698	700	684
Production	6,400	7,300	7,500
Imports	0	0	0
Totals	7,098	8,000	8,184
Exports	6,155	7,016	7,100
Dom.Consumption	243	300	300
Ending stocks	700	684	784

Total Distribution	7,098	8,000	8,184

Source: Kenya Nut Company Limited

Planted area and planting materials

There has been modest expansion in the area planted and greater focus has been placed on protected cropping. The area under macadamia presently estimated at 8,000 hectares is expected to increase albeit in a slow manner. During the first half of the year demand for planting material started picking due to the good long rains that were experienced. With the onset of the short rains demand is high even in the non traditional areas. New interest from coffee farmers is putting pressure on demand as the coffee sector is still trapped in a myriad of problems.

Kenya Nut Company, the sole producer of seedlings, has in store about half a million seedlings grafted and ready for sale. Rift Valley and Western Provinces, non traditional macadamia growing areas, have purchased some seedlings. The availability of seedlings was made possible after the Kenya Agricultural Institute (KARI) released several varieties suited for various agro-ecological zones.

Crop Yield

Yield varies based on age of trees, agronomic practices and weather conditions. It ranges between 10-30 kg per tree, nut in shell basis. KNC has higher yields since their fields are irrigated and are a pure stand estate (about 1,000 hectares,250,000 trees). The out grower yields are much lower since they intercrop and their husbandry is not up to standard given the hard economic times being experienced in the country. It is problematic to get actual production data, yield, hectarage and tree population for the out grower based production.

Consumption

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. Domestic consumption includes Kenya and its neighboring countries. Domestic consumption is estimated at about 40 tons of processed kernels. The sector suffers lack of awareness and prohibitive prices due to high processing costs.

Prices

During the year the price of raw nuts to farmers ranged between ksh 23-25 per kg depending on quality. An average moisture content of 15 percent is recommended. If higher moisture kernels are received they are usually returned to growers for additional drying. The terms of payment are cash on delivery at collection centers within the growing districts. Due to the attractive terms of payment and the non demanding production conditions of the macadamia tree there are good chances of increased production. The prices are forecast to remain the same in the year 2003.

Trade

Export

Kenya exported a total of 1,108 tons of macadamia processed kernels during 2002 with Japan taking over 60 percent of the exports. An increasing trend is forecast for Japan and the U.S. Kenya earned about kshs 388 million from Macadamia exports during the year.

Table 2: Kenya Export of Macadamia Kernels
(Tons)

Year/Country	2000	2001	2002	Expected 2003
Japan	529	684	698	933
USA	0	145	177	200
Germany	146	171	233	200
Switzerland	10	5	0	0
Totals	685	1,005	1,108	1,333

Source: Kenya Nut Company Limited

Table 3: Export Destinations and Earnings for 2002
(Processed kernels)

	Quantity	Value	Price/ton
	tons	Million(kshs)	Kshs/ton
Germany	233	81.55	350,000
Japan	698	244.3	350,000
USA	177	61.95	350,000
Total	1,108	387.8	

Source: Kenya Nut Company Limited

Macadamia processing

The KNC has a processing capacity of 10,000 tons per year but has always suffered inadequate supply of the raw material leading to stoppages throughout the year. Presently the factory runs well below capacity, a situation hoped to improve with the spread of production zones (western Kenya) .

Policy

The sector is self regulating at the moment. The Horticultural Development Authority (HCDA) is responsible for regulating and promoting the horticulture industry, macadamia and cashewnuts inclusive. KNC, which is involved in both macadamia and cashewnut production and processing believes that there are enough mechanisms in place to

regulate the sector and there is no need for additional government regulation. The role of GOK as a facilitator and increased private sector participation and collaboration is crucial for sectoral expansion.

Marketing

KNC is the only processor, a role it has played for the last few years after closure of Kenya Farm Nut Company. KNC has branded its macadamia and cashewnuts (Out of Africa) and has adopted aggressive promotion strategies to increase both domestic production and export. Opportunities in the U.S. under AGOA exist. The market suffers lack of awareness and very prohibitive high prices making local consumption very minimal.

Table 4: Supply and distribution of macadamia kernels
(Tons)

Year	2000	2001	2002	2003
Production(in shells)	4,900	5,800	6,400	7,300
Conversion rate %	17	18	18	19
Beginning stocks	210	132	126	126
Production (kernels)	833	1,044	1,152	1,387
Total Kernels	1,043	1,176	1,278	1,513
Exports	891	1,005	1,108	1,333
Dom.Consumption	20	45	44	50
Ending stocks	132	126	126	130
Total Distribution	1,043	1,176	1,278	1,513

Source: Kenya Nut Company Limited

B) Cashewnut Production in Kenya

Production

During 2002 cashewnut bushes received adequate rain hence good flower setting(August and September). The flower setting was affected by the short rains during the months of October to December causing poor fruit setting and/or pests and disease infestation. The main pest incidence widely reported is powdery mildew. A few farmers through the help of Bayer East Africa are spraying their trees with Bayfidan, a systemic fungicide for the control of powdery mildew. Harvesting has commenced with good prospects for increased production, estimated at about 20,000 tons NIS.

Yield and Area

Average production for a mature plantation tree is 10 kg per year. This is harvested from the end of October to January with a smaller harvest being obtained in February and March. The peak harvesting period is December to January

which coincides with the peak import demand in India the main buyer of raw nuts.

The area under cashewnuts has declined from 36,000 hectares in the late 80s to 27,000 hectares in 2000 and is assumed to be the same to date. However, area is difficult to capture and quite misleading as the trees are scattered with no specific spacing. The decline in area and production over the years has been attributed to low prices, market constraints and lack of capital by the farmers to revamp the sector. Most of the trees are over 40 years old resulting in low production and quality, as the optimum production age is estimated at between 8 to 20 years. This has resulted in gradual loss of canopy due to breakage of branches. Intercropping is a common occurrence with little attention paid to the cashewnut trees. Low production has also resulted for the intercropping with more viable trees like mango, bixa and citrus.

Production constraints

Cashewnut flourishes even in the poorest soils and, has excellent cashcrop prospects for the areas where other productive crops cannot grow well. Historically, production was traditionally from the coast province namely Kilifi, Kwale and Lamu (presently extended to Malindi). Kilifi District Co-Operative Union supplied raw nuts to Kenya Cashewnuts Limited (KCL), through the National Cereals and Produce Board until 1997 when the market was liberalized. KCL came into production in 1975 and was privatized in 1993 and continued under the same name until it closed down in 1998 (presently under receivership).

The major production constraints include low prices, old age of orchards coupled with poor tree husbandry, poor pest and disease management, high cost of farm inputs, inadequate field extension services, poor post harvest techniques, underdeveloped infrastructure and land tenure systems among others.

Processing and Consumption

Over 90 percent of cashewnut production is exported raw to India. Farmers through Community Based Organization's have organized themselves to boost production and marketing. They have primitive type of drum roaster where shelling, peeling and grading is done by hand. Pan roasting of cashewnuts has always existed in all the growing areas. Closure of the Kilifi processing factory led to the proliferation of small processors, mainly in Kwale, Kilifi and Malindi districts. Farmers groups, self help and women groups constitute the small processors with individuals who used to work at the processing factory managing the operations. Declining cashewnut production in recent years is also a major constraint to re-establishment of a processing factory. Other processing constraints include outdated processing technology, under utilization of cashew by products, poor quality/inadequate raw materials, poor legislation on import and export of cashew and cashew products.

In years past the apple was used to make jam and jelly as well as a beverage. The bark was used medicinally.

Marketing

Before liberalization of the marketing of raw cashewnuts, the crop was marketed through co-operative societies, agents and traders, and was purchased by Kenya Cashewnut Limited. Cases of co-operative mismanagement were reported

widely with farmers being paid late or not paid at all. Liberalization set in just when the only processing factory went under.

The major players in the marketing of cashewnuts include Kenya Nut Company Limited, Wonder Nut, Kenya Bixa Limited, Mombasa Cashewnut Factory and Kilifi District Farmers Association. This is in addition to a host of small agents who buy small quantities. The major constraints in marketing range from no organized marketing system, inadequate processing capacity(over 90 percent are exported raw), unstable prices, no market information, poor quality control to lack of a regulatory body.

Policy

Liberalization of the cashewnut marketing coincided with the demise of the main processing factory Kenya Cashewnut Limited in 1998. There was an unprecedented influx of buyers from India, offering about kshs 70 per kg NIS. The price subsequently dropped to the present level, ranging from 20-35 per kg. India is also a market for Kenya's neighboring countries, Tanzania cashewnut(estimated production is about 140,000 tons NIS) and Mozambique.

Various initiatives have been undertaken to improve cashewnut production and marketing. Some of these have targeted an integrated approach to crop management. The original organizations involved in this initiative were Kenya Agricultural Research Institute, Bayer East Africa Limited, choice Humanitarian (NGO), Coast Development Authority and recently Action Aid Kenya. Pilot projects are yielding fruit with expectations the other farmers will benefit as the project expands to other areas.

The stake holders have been having meetings with an objective of revising existing policies and introduce new ones to suit a liberalized economic environment. This proposed policy paper has been drawn with the prime objective of putting in place strategies, plans, and institutions for the development, promotion and sustainability of the cashew nut production. The involved organizations hope to cover seed production, research, production, extension services, marketing, processing and quality assurance systems.

Although cashewnut contributes only about 1 percent of total Kenya agricultural production, it is an important crop because it is grown in an area with few alternative cash crops. The cashewnut industry earns the country about kshs 375 million. Presently the Ministry of agriculture governs the industry but has no specific Act nor policy.