



AGRICULTURE AND FOOD AUTHORITY

NUTS AND OIL CROPS DIRECTORATE

NUTS AND OIL CROPS VALIDATED STATISTICAL REPORT 2021



Dated: 2nd April, 2022

a) Macadamia Nuts

Table 1: Area under Macadamia nuts, Production and the Value 2020-2021

County	Area (Ha)		Quantity in tons		Values millions (Kshs)	
	2020	2021	2020	2021	2020	2021
Muranga	1,892	1,893	10,823	11,546	693	774
Meru	1,145	1,146	6,614	6,992	390	489
Embu	1,139	736	6,801	4,487	343	292
Kiambu	830	833	4,711	5,080	306	345
Kirinyaga	702	705	3,912	4,300	215	279
Nyeri	407	409	2,011	2,497	101	157
Tharaka Nithi	242	244	1,390	1,487	74	97
Machakos	136	139	821	850	48	51
Nyandarua	132	133	722	810	35	41
Baringo	83	83	481	509	22	31
Busia	75	46	1.2	5.4	0.054	0.297
Taita Taveta	73	74	446	454	24	30
Trans-Nzoia	50	490	59	2,988	3	167
Elgeyo Marakwet	44	44	41	68	2	4
Makueni	41	43	45	65	2	4
Uasin-Gishu	38	45	44	70	2	4
Others	114	117	211	354	12	21
TOTAL	7,142	7,180	39,133	42,562	2,271	2,786

Source: AFA-Nuts and Oil Crops Directorate

In the year 2021 the area under macadamia was estimated to be 7,180 ha, which was a slight increase of 38 ha from 7,142 ha recorded in the previous year (2020). Generally, there has been rapid expansion over the years save for last year (2021) when there was a slowdown in expansion. Notable increase in area under crop was registered in Trans Nzoia county where the newly established crop in large scale farms came into bearing. In Busia County, the increased acreage as a result of newly planted crop reported in 2019/2020 season was revised downward as a result of crop failure during establishment.

The total annual production of raw nuts in shell (RNI) of macadamia increased by 8.8% from 39,815 tones recorded in 2020 to 42,562 recorded in the year 2021. The increased production is attributed to a rebound of the industry recovering from the effects of Covid 19 that had resulted in reduced economic activities across the country in the previous season.

The average productivity (yield per tree) in Kenya is low relative to the expected yield potential of about 70-100 kg/tree per year. In the year 2021 the average productivity was estimated at 39kg per tree per year from the mature bearing trees and 17kgs per tree per year from the young trees now starting to bear.

The prices of macadamia recorded an improved performance during the year 2021. There was an increase of prices by Ksh 15 from Ksh 50/kg reported in 2020 to Ksh 65/kg reported in 2021. The improved prices are credited to increasing demand for macadamia kernels internationally as traditional consumers resume operations and place orders for the commodity. As a result of the improved prices, the value of macadamia nuts at farm gate has increased from Ksh 2.27 billion in 2020 to Ksh 2.78 billion reported in 2021.

a) Coconut

Table 2: Area under coconut, Production and Value 2020-2021

County	Area (ha)		Quantity(MT)		Value (Ksh.) Millions	
	2020	2021	2021	2021	2021	2021
Kilifi	41,470	35,664	52,853	39,640	2,384.0	2,378.4
Kwale	31,384	30,873	46,227	37,906	2,139.0	2,426.0
Tana River	1,070	925	822	706.92	35.3	56.6
Lamu	10,722	9,864	6,894	5,584	322.0	446.7
Mombasa	158	145.36	2,344	1,992	122.0	159.4
Taita Taveta	102	93.84	873	724.59	36.1	58.0
TOTAL	84,906	77,566	110,013	86,554	5,038	5,525

Source: AFA-Nuts and Oil Crops Directorate

The coastal parts of the county where coconut is predominantly grown experienced dry weather conditions during the year under review. The drought led to coconut trees drying up due to water stress, the result was reduced acreage of the area under coconut across the region and substantial decline in both production and productivity. The total number of trees reduced by an estimated 9% from 10 million trees reported in the year 2020 to an estimated 9.1 million trees in 2021 most of the trees which dried up were the vibrant and newly established ones. Consequently, there was a marked reduction in the quantities of major coconut products i.e. mature nuts, tender nuts and toddy.

The area under coconut was estimated to have shrunk by 9% from 84, 906 hectares reported in 2020 to an estimated 77,566 hectares reported in 2021. The dry spell however had more adverse effects in Kilifi county where a substantial number of trees were reported to have dried up. In this county, some of the coconut trees are grown far off the ocean where the adverse conditions are more pronounced resulting in the crop losses reported. There are fears that the effects of the drought have reversed the gains from coconut replanting initiatives undertaken in the last few years by farmers and government seedling subsidy programs. Going forward, such initiatives must be scaled up for recovery. The reduced tree population will make the already dire situation worse in terms of production volumes since senile trees account for more than 25% of the total tree population, such trees are beyond the production stage.

The average yield per tree realized in 2021 significantly reduced from 34 nuts per tree in 2020 to 28 nuts per tree in 2021, besides a reduction in the size of the nuts. Generally, there was lower production and productivity in the year 2021 as compared to the year 2020.

As a result of the lower supply of nuts in the year 2021 and a stable demand from local processors and the export market, the farm gate prices averaged Ksh 18 per piece from the Ksh 16 per piece reported in 2020. Market prices ranged between Ksh 30 in local town markets and Ksh 40 in the major markets across the region. In markets far off the coast, market prices as high as Ksh 50 per piece were reported in the year 2021.

b) Cashewnuts

Table 3: Area under cashew nuts, production and value trends 2020-2021

County	Area (Ha)		Quantity (MT)		Values (Ksh) Millions	
	2020	2021	2020	2021	2020	2021
Kilifi	9,445	9,595	4,704	3,387	211.69	162.59
Kwale	7,025	7,135	3,672	2,644	165.24	126.90
Lamu	5,450	5,559	3,803	2,738	190.14	150.60
Taita Taveta	428	428	246	177	9.58	7.96
Tana River	186	186	155	112	6.22	6.15
Others	155	255	88	63	4.38	3.15
Total	22,690	23,158	12,668	9,121	587.25	457.35

Source: AFA-Nuts and Oil Crops Directorate

The performance of the cashew subsector in Kenya has been on a decline over the years and the situation remains dim. Rampant tree felling for supply of firewood for domestic and industrial use is a major threat to the existing tree population overshadowing the ongoing replanting initiatives. Low farm gate prices for cashew has also contributed towards the lack of interest by the farming community in the cashew growing zone. The abandonment has led to general neglect at farm level without routine maintenance practices in terms of weeding, pruning or diseases/pest control. While the dry spell prevailing in the year 2021 resulted in reduced yields, the quality of the harvested produce was better than the previous year, there were fewer moldy or insect damaged nuts being marketed.

Although replanting is being countered by tree felling, the year 2020 recorded a marginal increment the total estimated area under cashew. Total acreage increased by 2% and was reported to be 22,690 ha, which is a slight increment from the 22,686 ha reported in the year 2019. The increased acreage was as result of new planting reported in Kilifi,

Lamu and Kwale counties through government efforts and as part of environmental conservation.

Production quantities declined as a result of the drought conditions prevailing in most parts of the coast region during the year under review. The total production reduced from 12, 801 tones reported in 2020 to 9,121 tones recorded in 2021. Most of the harvested produce was consumed domestically after cottage level processing while less than 20% of the processed kernel was exported.

The highest farm gate prices for raw cashew nuts(RCN) were reported in Lamu and Tana River counties where they averaged Ksh 55 during the year. In Kilifi, Kwale and Taita Taveta counties lower farm gate prices averaging Ksh 48 were reported. The market price for Kernel has remained stable in the last two years and averaged Ksh 1000/Kg at cottage factory level across the production belt and Ksh 1, 100/Kg across the country in the retail stores. Farm gate prices are sometimes lower than reported as brokers purchase the produce at very low prices from individual farmers with low bargaining power. The data analyzed herein reckon a struggling industry on a downward trend over the years resulting from neglect and despair among farmers. There is however hope of a rebound expected from expansion into the new production areas of Makueni, Kitui, Tharaka Nithi and Embu counties.

c) Peanuts (Ground nuts)

Table 4: Area, Area under Peanuts, production and the value 2020-2021

County	Area (Ha)		Quantity(MT)		Value (Ksh) Million	
	2020	2021	2020	2021	2020	2021
Homabay	3,923	5,529	3,461	3,870	460.31	491.25
Kakamega	1,377	2,100	1,232	2,601	158.88	234.09
Migori	972	1,541	962	1,510	134.71	145.53
Kisumu	902	561	661	592	92.48	74.61
Siaya	671	627	619	502	86.72	65.76
Bungoma	591	760	665	854	86.48	105.11

Busia	515	940	601	846	78.13	93.06
Elgeyo Marakwet	502	339	451	329	45.10	35.26
Vihiga	496	68	420	30	60.90	3.90
Meru	412	849	406	764	52.73	68.73
Kisii	196	365	179	420	24.72	54.02
Tharaka Nithi	121	192	59	115	8.35	11.52
West Pokot	81	15	57	11	22.44	0.99
Trans-Nzoia	67	77	42	45	5.73	4.32
Lamu	67	10	68	9	9.37	1.35
Kwale	61	29	56	15	8.03	1.66
Baringo	52	98	46	87	6.18	9.00
Taita Taveta	22	14	14	10	2.06	1.10
Tana River	9	107	19	222	2.85	22.20
Others	61	53	54	66	8.10	7.25
TOTAL	11,098	14,275	10,071	12,897	1,354	1,431

Source: AFA-Nuts and Oil Crops Directorate

In the nuts category, peanuts are a favorite snack among a majority of the Kenyan populace. Unfortunately, the increasing demand for peanuts underpinned by the country's increasing population has not been matched with increased production or even productivity. The country is a net importer of peanuts from counties within the COMESA region such as Tanzania, Uganda and Malawi to supplement the meagre domestic production. During the 2021 season, the area under the crop recorded a (28%) increment i.e. 3,177 ha from 11,098 ha reported in 2020 to 14,598 ha reported in 2021. The increase is attributed to opening up of new croplands within and without the traditional production counties. Additionally, new farmers are venturing into peanut farming which has reduced competition from other crop enterprises such as maize and beans commonly considered a staple for food security. The habitual unavailability of quality planting seed

has been to a small extent addressed by community seed producers taking up seed production as a business venture. Most areas however reported lower yields due to recycling of previous season produce for use as seed.

The readily available domestic market has worked in favor of the subsector. Overall production increased during the year under review by 2,826 tons as a result of increase acreage and productivity in Homa Bay, Kakamega and Migori Counties. Strategies and deliberate interventions to open new land for peanut production into the Rift valley, Coast and upper Eastern regions will help increase peanut production.

The highest farm gate prices in 2021 were reported in Lamu County at Ksh 150/kg and Ksh 126/kg in Homa bay county and least prices reported in Meru and West Pokot counties at Ksh 90/Kg. Market prices on the other hand ranged between Ksh 180/Kg and Ksh 220/Kg in the major market outlets across the country.

d) Bambara Groundnuts

Table 5: Area under Bambara, Production and Value 2020-2021

County	Area (Ha)		Quantity (Mt)		Value (Ksh.) Millions	
	2020	2021	2020	2021	2020	2021
Busia	97.2	71.2	196	192	68.6	66.24
Kakamega	61.1	82.8	177	192	63.72	68.16
Bungoma	8.2	8.1	19	20	7.22	7.2
Vihiga	7.6	11.2	22	30	8.03	10.5
Lamu	7.2	6.5	24	21	9.36	8.19
Kwale	5.5	4.9	12	10	4.44	3.7
Total	286.8	284.7	450	465	161.37	163.99

Source: AFA-Nuts and Oil Crops Directorate

Despite the high nutritional value in bambara groundnuts, the crop's production has diminished over time owing to various factors. The crop is mostly being cultivated for subsistence purposes except for the excess disposed in the local markets. Substantial amounts of bambara nuts are obtained from Butula subcounty in Busia county and from Kwisero subcounty in Kakamega county. The estimated acreage marginally declined from 286.8 hectares in 2021 to 284 hectares reported in the year 2020. On the other hand, production increased by 15 tons from 450 tons reported in 2020 to 465 tones as a result of better productivity overall. Bambara has very high potential currently underexploited especially because of low consumer awareness. Its production can therefore be substantially increased by awareness creation and making available affordable planting seed. The yields ranged between 2-3 tons per hectare across all the production zones during the year under review. The farm gate prices ranged between Ksh 345/Kg and Ksh 390/Kg while market prices were reported to be between Ksh 360 /Kg and Ksh 400/Kg across various market outlets in the country.

e) Sesame (Sim sim)

Table 6: Area under Sesame, production and value 2020-2021

County	Area (Ha)		Quantity (MT)		Values (Ksh) Millions	
	2020	2021	2020	2021	2020	2021
Lamu	11,539	4,000	10,029	2,567	902.61	191.23
Busia	502	119	370	80.34	40.7	5.59
Mandera	258	169	220	106	20.9	10.18
Tana River	122	97	69	52	5.87	4.3
Bungoma	10	27	11.5	20	1.15	2.30
Siaya	83	19	64	6	6.02	0.62
Kakamega	6.8	1.7	5.3	1.4	0.74	0.14
Homabay	4.7	14	4.1	12.06	0.51	1.21
Others(Wajir, Migori)		35		17		1.87
Total	12,526	4,881	10,773	2,861.8	978.5	217.44

Source: AFA-Nuts and Oil Crops Directorate

The higher production of sesame reported in the previous two years took a dip in 2021 as a result of the dry weather conditions experienced in the coastal region. Lamu county which is the largest producer was particularly more affected reporting a more than 70% decline in production. The total area under the crop shrunk from 12,526 hectares reported in 2020 to 4,881 hectares reported in 2021 which as a 60% drop. As much as the area planted in 2021 compares well to the area planted in 2020, most of the crop dried at the critical establishment stage before flowering resulting in the massive losses reported. Similarly, there were depressed yields caused by poor rains distribution and intensity from 0.8 tons per hectare to 0.6 tonnes per hectare. The total production volume declined from 10,773 tones valued at 979 million in 2020 to 2,861.8 tons valued at Ksh 217.44 million reported in 2021.

f) Canola

Table 7: Area under Canola, Production and value 2019 -2020

County	Area (Ha)		Quantity(Tons)		Value Ksh (Millions)	
	2020	2021	2020	2021	2020	2021
Nakuru	1,135	1,157	3,915	4,091	176,202	204,550
Laikipia	1,100	1,170	3,790	3,811	170,550	171,495
Meru	604	720	1,832	1,944	20,804	89,424
Narok	259	237	870.7	832	39,182	37,440
Uasin Gishu	163	175	560.4	603	24,097	30,150
Nyeri	149	173	470.3	523	19,753	24,058
Trans -Nzoia	144	138	643.7	628	28,323	30,144
Baringo	140	98	598	506	23,920	26,312
Samburu	132	124	504.3	477	21,181	23,850
Nyandarua	122	135	520.2	501	23,409	27,054
Elgeyo/Marakwet	98	75	402.2	386	16,088	20,072
Bungoma	45	34	160.7	129	6,589	5,805
Total	4,091	4,236	14,268	14,431	570,098	690,354

Source: AFA-Nuts and Oil Crops Directorate

The high demand for vegetable oils provides a ready market for canola which is now increasing in production within the major production areas. Principally grown by large scale farmers for soil improvement the crop used for rotation with wheat, maize and barley. More small scale farmers are now embracing canola farming thus pockets of the crop can be sported in high attitude areas such as Timau, Endebess, Moiben and Mau Narok.

The production for canola stood at 14,431 tons in 2021 from up from the 14,268 tons reported in 2021 which was an increase of 168 hectares. The increased acreage is attributed to more small scale farmers being contracted by oil processing companies. Farm gate prices increased slightly during the year 2021 to range between Ksh 45 and Ksh 50. The prices in the subsector are however not competitive as the crop is only sold to one major processing company which contracts farmers across the country for use in margarine and vegetable oil production.

g) Exports

Table 8: Exports of Nuts and Oil Crop Products

Product	Export Quantity(MT)		Export Value Ksh (Millions)		Major Destination Markets
	2020	2021	2020		
Macadamia Nuts	5,457	6,300	6,222	7,547	U.S.A, Germany, Netherlands, China, Vietnam and U.A.E
Macadamia oil	218.08	187.31	198.02	157.98	
Coconut Products	139.67	75	316.78	102.3	Tanzania, Egypt, Rwanda, USA,
Cashewnuts	163.190	154.21	170.509	179.67	U.S.A,U.K, Germany Nigeria, and U.A.E
Total	6,065	6,716	6,744	7,986.9	
				5	

Source: Nuts and Oil Crops Directorate

The export basket of Nuts and oil crops products (macadamia, cashew and coconut) increased by 679 tons from 6,065.68 tons valued at Ksh 6.7 billion reported in the year 2020 to 6,716.52 tons valued at Ksh 7.9 billion recorded in 2021. The main contributor for the increased exports was from macadamia nuts kernel and ready to eat cashewnuts.

Industry players reported increased demand from traditional buyers of Kenya's produce as the world recovers from the Covid 19 market disruptions. The U.S.A still remains the major buyer of Kenyan nuts primarily for use as snacks and in confectionary followed by Germany and Netherlands which are entry hubs for Kenyan products destined to the European Union.

Imports

Table 9: Imports of nuts and oil crops Products

Product	Import Quantity(MT)		Import Value Ksh (Millions)		Origin Countries
	2020	2021	2020	2021	
Macadamia Nuts	118.44	110.3	14.20	13.1	Zambia, South Africa
Coconut Oil	73.91	82	80.71	91.5	Malaysia, Philippines, India, Thailand
Coco Peat	52	61	10.65	11.2	India, Thailand, Malaysia, Philippines
Sundry coconut products	1,456	1,587	2,021.87	2,171	India, Thailand, Malaysia, Philippines
Groundnuts	1,540	2,543	195.32	312.1	Malawi, Uganda, Tanzania, Rwanda
Cashewnuts	119	105	83.4	77.1	Tanzania, Mozambique
Total	3,359.4	4,486.3	2,406.15	2,676	

Source: Nuts and Oil Crops Directorate

The year 2021 registered increased imports in terms of volume and value across all the import commodities from 3,359.4 tons valued at Ksh 2.40 billion in 2020 to 4,486.3 tons valued at Ksh 2.6 billion realized in 2021.

Kenya is a net exporter of nuts however the country imports some nuts for local consumption and also to bridge the raw materials deficit in her processing facilities. In terms of coconut products, Kenya has a narrow product base, the country imports finished coconut products such as cosmetics and coconut oil for consumption. In most cases the imports are cheaper than our locally produced coconut products hence the imports reported.