



CASHNEWS

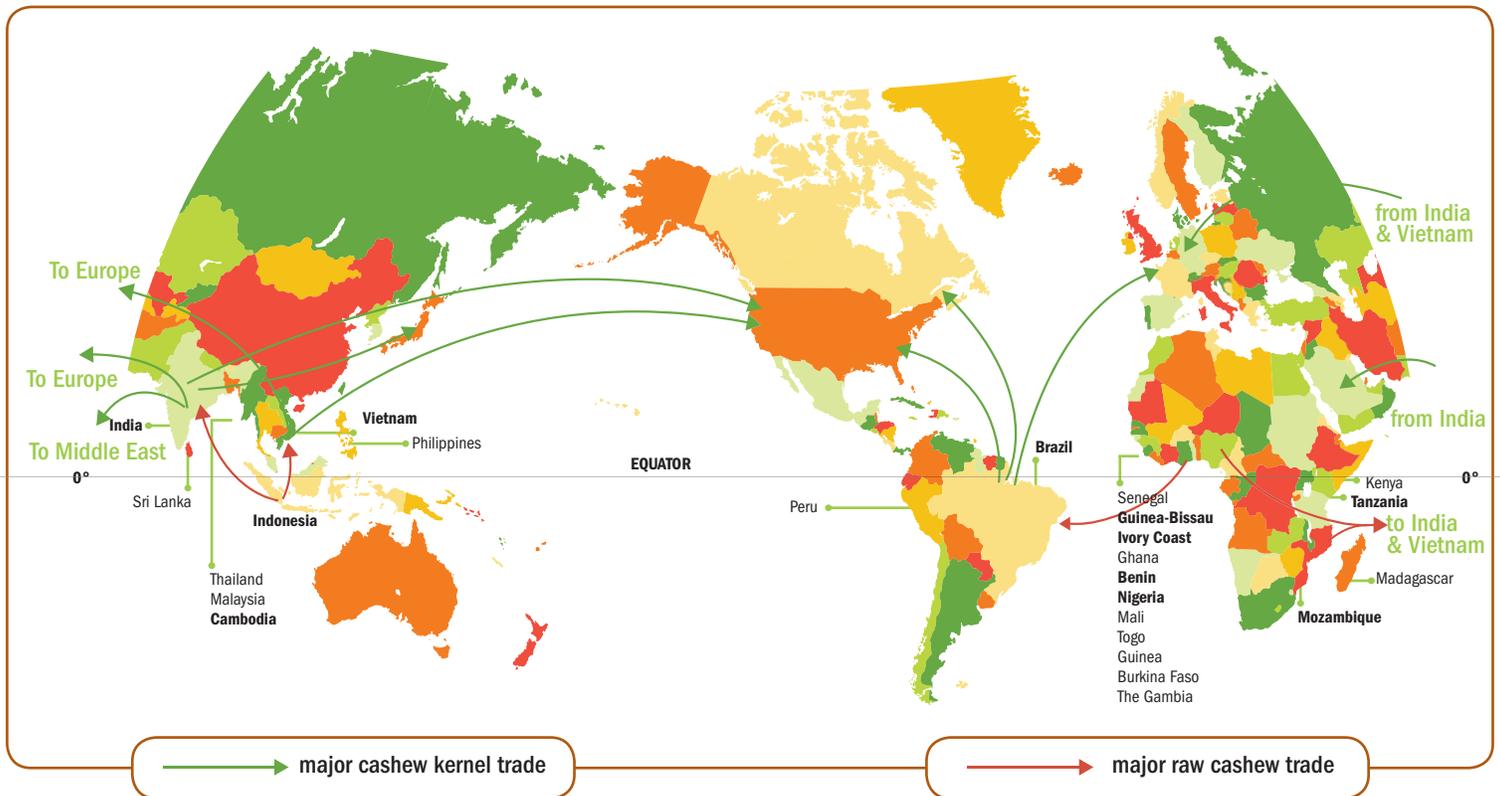
Highlights of the Cashew Industry
presented by Red River Foods, Inc.

JULY 2012

A WORLD VIEW

The cashew is native to northeastern Brazil. In the mid-to-late 1500s, Portuguese traders and explorers introduced the cashew tree to India and to the east coast of Africa in an area that is now Mozambique. In Africa, the tree was spread along the east coast (today, Kenya and Tanzania) and was later introduced to the continent's west coast, where it presently grows from Senegal to Nigeria. Portuguese and Spanish traders also introduced the cashew tree to Southeast Asia. The cashew tree now grows in tropical climates of about thirty countries across the globe within a band approximately 25-30 degrees north and south latitude of the equator. India is the largest single producer of cashew nuts while West Africa--principally Ivory Coast, Benin, and Guinea-Bissau--is the largest regional producer. Vietnam, Brazil, and East Africa are the other major sources of production. Indonesia has become a major producer and exporter in Southeast Asia.

The world map below identifies countries with estimated raw cashew production of one or more million kgs in 2012. Countries which are identified in bold are major producers and are the most important exporters of either raw cashews and/or processed cashew kernels. The cashew kernel trade and the raw cashew trade are highlighted, showing the major kernel export destinations from India, Vietnam, and Brazil and the sources of Brazilian, Indian, and Vietnamese raw cashew imports. Within the past year, the raw cashew trade has expanded from West Africa to Brazil as Brazilian processors, having weathered two short crops in recent years, seek another supply source.



INDUSTRY PERSPECTIVE

The international cashew market seems to have reversed course in one year's time. At this point in 2011 a very volatile market was still experiencing rising prices. At mid-year in 2012, the market is relatively calm after a moderation in prices and there is an oversupply of product with wary buyers. As we publish this brochure, the industry is dealing with:

- A heightened focus on food quality/safety requirements, especially in the U.S., and greater demand for supply chain visibility.
- Large, high-priced inventories held by some Vietnamese and Indian suppliers and their inability to move those inventories because of price.
- Some Vietnamese suppliers having gone out of business because of their inability to sell their inventories...or having to sell at sizable losses.
- Continuing concerns about product quality, primarily about Vietnamese product. Those packers still holding expensive seed from Africa that is over a year old are faced with deteriorating quality; this becomes obvious when they blend old and new crop to try to cut their losses.
- The false assumption of some suppliers that cashews will continually move, even at abnormally high prices, and their failure to recognize that cashew consumption responds to the "law of supply and demand." The demand for cashews is price elastic; a change in price will noticeably affect the quantity demanded. Demand will most likely decline as prices rise; conversely, demand will likely increase in tandem with moderating prices.
- The effects of the 2011 price spike, which resulted in "demand destruction." Those effects are still reverberating in the market as evidenced by lower demand, particularly in the U.S.; consumers and therefore buyers are proceeding with caution.
- Uncertainty about West African supplies. Civil unrest in the region seems to be an annual event: In 2011 civil disorder delayed shipments from the Ivory Coast. In 2012 a coup in Guinea-Bissau lowered supply expectations from that country.

Perhaps a good way to describe the international cashew market is to liken it to a kaleidoscope. The various colored pieces in a kaleidoscope form an attractive geometric pattern, but a slight turn (as civil unrest in a major West African producer...to extend the metaphor) of the kaleidoscope can result in a totally different geometric-market-pattern from one year to the next. Yet, that is what makes our industry so very challenging and so very dynamic.

Vacuum Sealed Cashew Kernel Bundles



QUALITY & FOOD SAFETY FIRST

Product quality and food safety are paramount in the U.S., underscored by the passage of the Food Safety and Modernization Act (FSMA) by Congress in December 2010 and enacted into law in January 2011. The U.S. Food and Drug Administration (FDA) is the administering agency. The Act is predicated on the principle of prevention of food safety problems, shifting the FDA's attention away from reaction and response. The FDA has been charged with establishing requirements for preventive controls, produce safety, and a foreign supplier verification program. Facilities will be required to implement controls consistent with the internationally recognized principles of Hazard Analysis and Critical Control Points (HACCP). Growers of fresh produce must also establish preventive measures for the safe production and harvesting of fruits and vegetables. Regarding imported foods, an official of the FDA noted in April 2012 that "rather than placing primary reliance on FDA inspectors detecting and correcting problems at the port of entry, *importers must manage their supply chains to ensure the safety of imported foods.* (Emphasis Added) FSMA makes importers accountable for verifying, in a manner transparent to FDA, that the food they import has been produced in accordance with U.S. standards, or under modern preventive controls that provide the same level of public health protection." As of April of this year, the proposed rules for these measures were in the final review stage.

As of June 2012, the FDA's website cited specific requirements applicable to importers:

- Importers must perform supplier verification activities to ensure imported food is safe.
- The FDA can refuse admission to imported food if the foreign facility or country refuses to allow an FDA inspection.
- The FDA can require certification, based on risk criteria, that the imported food is in compliance with food safety requirements.
- The FDA is directed to establish a voluntary program through which an importer may receive expedited review of his shipments if the importer has taken certain measures to assure the safety of the food.

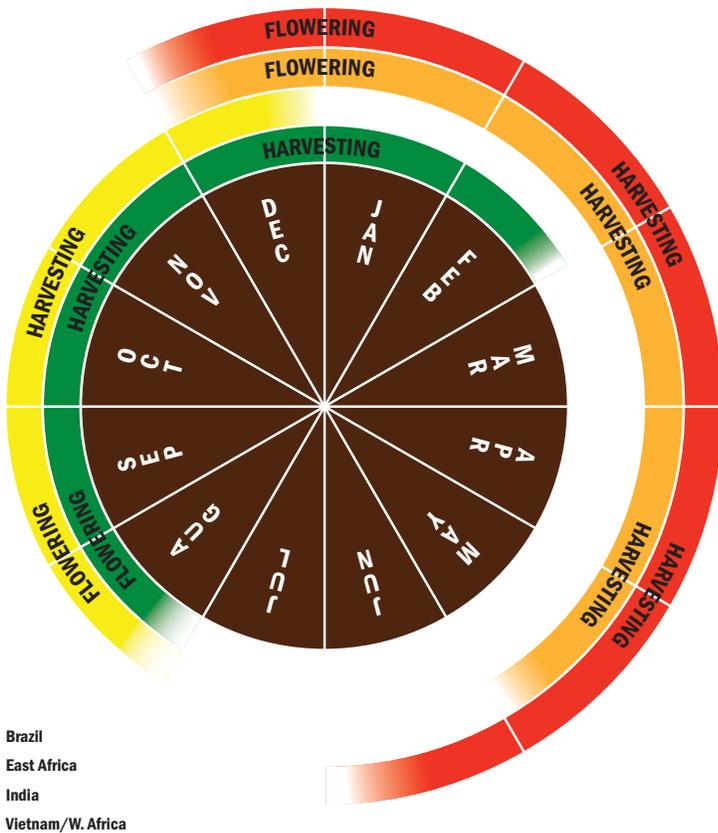
The key for importers in meeting the new FDA requirements is product traceability. Anticipating such requirements, Red River has partnered with SourceAgent, an internet-based traceability system. SourceAgent allows a supplier and importer to establish an ID number and barcode for complete supply chain visibility and traceability. Suppliers complete an on-line form to include such information as Product Type, Production Date, Shipment Date and Details, and Packaging Data. Our supply chain partners have immediate access to Microbiological Analysis, Certificates of Analysis and Quality, Bills of Lading, Non-GMO Statements, etc. Our suppliers also have the ability to house important "supplier specific" documents including Product Specifications; Kosher, HACCP, ISO, BRC Certifications; and Third Party Audits. Full details of the Red River/Source Agent system can be viewed at www.SourceAgent.com.



SourceAgent

THE PRODUCTION CYCLE

The world cashew trade is balanced on the annual cashew production cycle. Short or poor crops anywhere or abnormal weather conditions distort the trade pattern, most importantly affecting prices. Vietnam produces the year's first crop, and shortly thereafter India's crop comes in. At approximately the same time, West African crops are being harvested. Harvest of the Brazilian, East African, and Indonesian crops begins in August/September, tying the trade over until the new crops of Vietnam, India, and West Africa are harvested early the following year.



Beyond the unpredictable effects weather might have on production and ultimately the trade, other factors affect the international market. Rising Indian domestic consumption has drawn down the amount of kernels available to the trade as Indian exports decline. With only limited processing capabilities, Africa exports the bulk of its raw seed to India and Vietnam. Yet, when there is political instability in West Africa, some disruption in the trade is assured. Like the civil disorder in the Ivory Coast early in 2011, a military coup in Guinea-Bissau in early 2012 cast much doubt over the availability of a good portion of West African raw seed. In Guinea-Bissau itself, bank closures dried up the supply of money, halting the movement of much of the crop.

Maturing Cashews



HARVESTING SEASONS

Harvesting seasons are generally similar in the producing countries, depending on their location relative to the equator. Countries north of the equator, including India, Vietnam, and producers in West Africa, harvest from early in the calendar year to approximately mid-year. Countries south of the equator, including Brazil and producers in East Africa, harvest from September or October to early in the following calendar year.

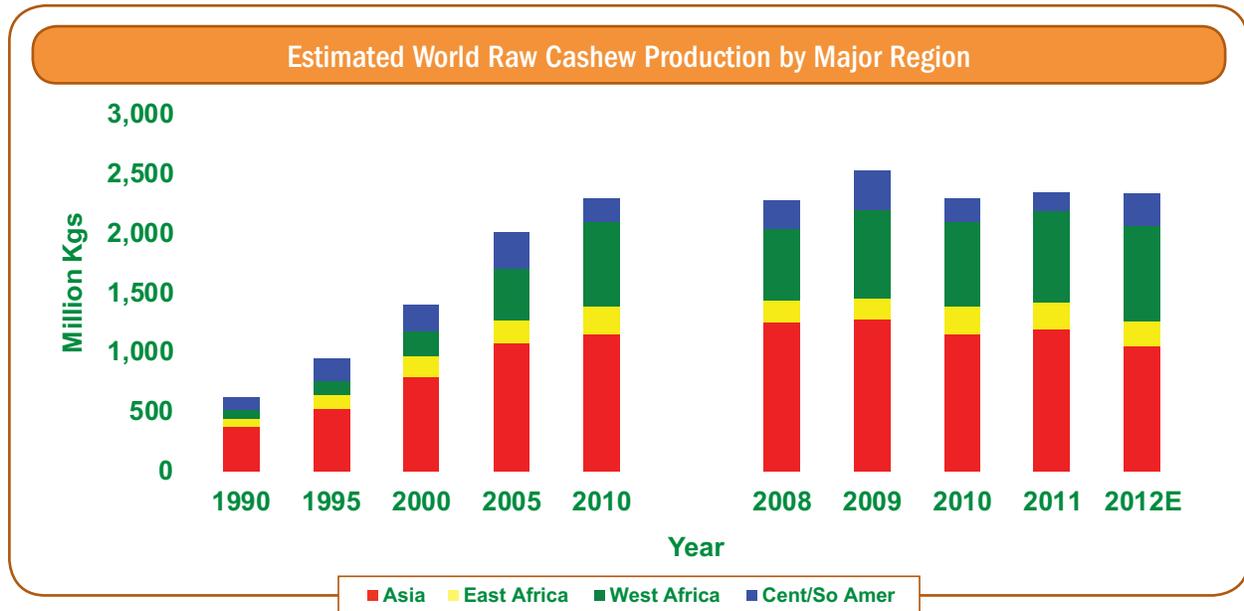


Cashew Seed Spread for Drying in Vietnam



RAW PRODUCTION TRENDS

The edible cashew kernel is encased within a kidney-shaped seed or pod at the bottom of a cashew “apple” (The “apple” is actually a stem.) Cashews are not harvested in the conventional sense. Once the cashew apple falls to the ground, the cashew seed is removed from the apple. Cashew seeds are gathered and taken to various collection points. From there they are delivered to a processing facility. After drying, the cashew kernel is separated from the seed either mechanically or by hand. Where mechanical separation takes place, primarily in Brazil, there is a higher percentage of broken grades.



source: Red River, Industry, FAO

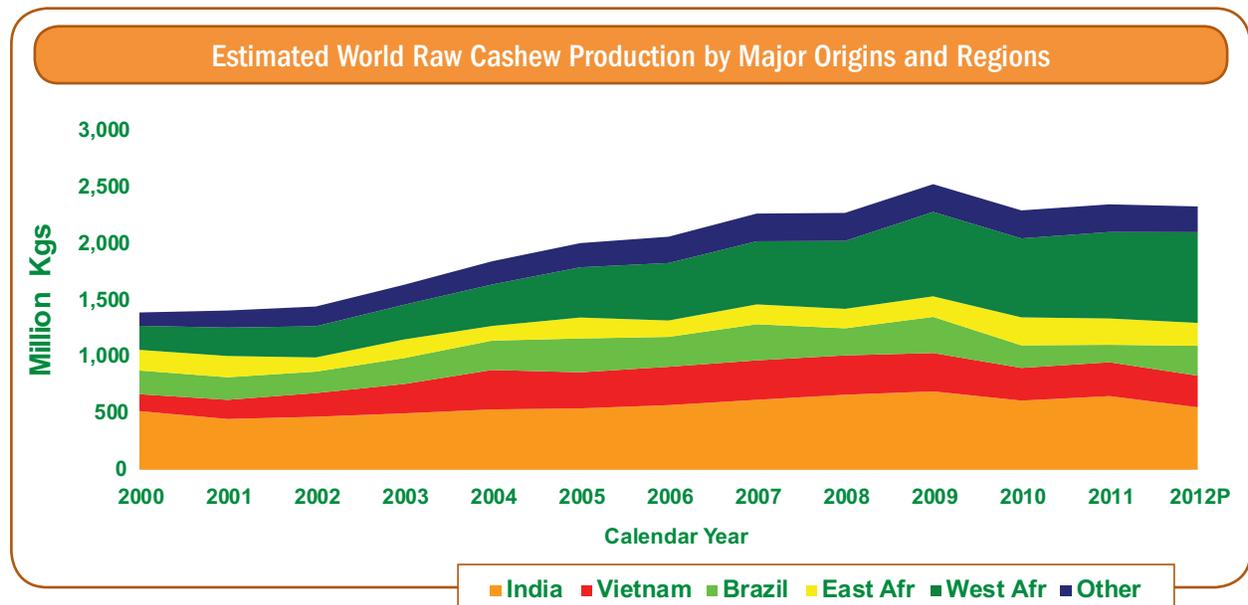
Cashew production is extremely difficult to estimate, and production estimates have to be offered with numerous caveats. Crop size estimates for any one producing country can vary widely because of the inherent difficulties in accounting for output. Crops are harvested from trees growing in their natural habitat, as there are few plantations in most countries. Cross-border activity, particularly in West Africa, prohibit accurate counting by country in that region. Further, there is little processing in West African countries, hence there are few factory sources from which reasonable estimates can be made. Cashew seeds are not weighed during any of the collecting, buying, or transfer stages. After being gathered and brought to a series of collection points, the cashews are delivered to processors. The crop size is frequently estimated after the raw cashews have been processed and some indication of average kernel weight has been ascertained. Thus, raw cashew estimates are often extrapolations from processing outcomes...as well as the “best guesses” of those active in the industry.

Cashew Apples

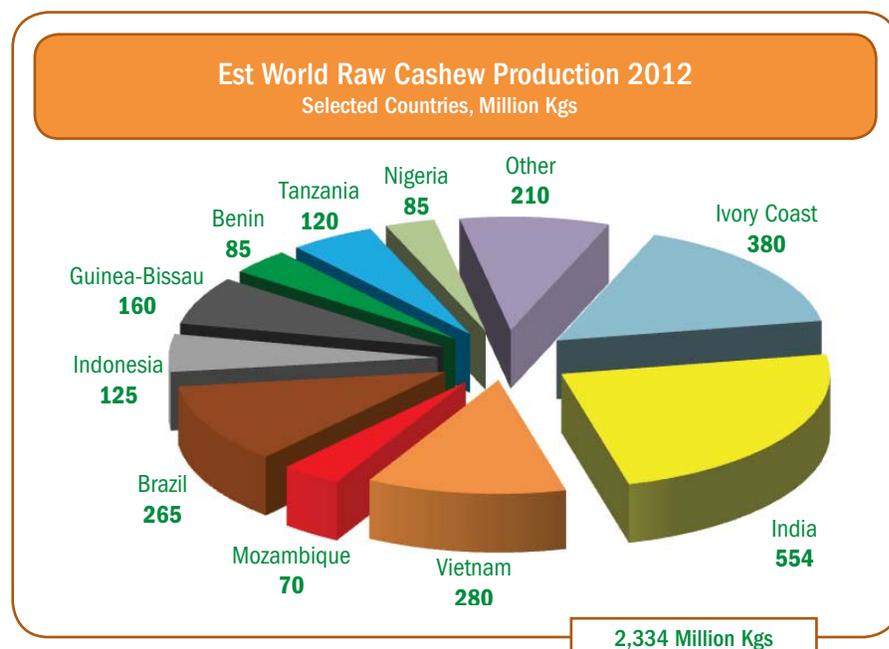


RAW PRODUCTION TRENDS CONTINUED

World raw cashew production is estimated at 2,334 million kgs for 2012, essentially the same as the 2011 estimate of 2,353 million kgs. It is of note that the 2011 and 2012 levels are about 900 million kgs above output just ten years ago when 2002 production was estimated at 1,447 million kgs. In 2011, West Africa produced an estimated 767 million kgs on the strength of a very large 385 million kg crop in the Ivory Coast. Crop estimates have varied for West Africa this year, but at the time of this writing, the region is expected to produce 800 million kgs, 30+ million kgs above 2011 production. Sizable declines in production for 2012 are expected in India, Vietnam, Indonesia, and Tanzania. These should be somewhat offset by increases in Brazil, Guinea-Bissau, and Ghana. For 2012, the five major producers (India, Ivory Coast, Vietnam, Brazil, and Guinea-Bissau) are expected to account for over 70 percent of all production. West Africa by itself would represent one-third of the world total.



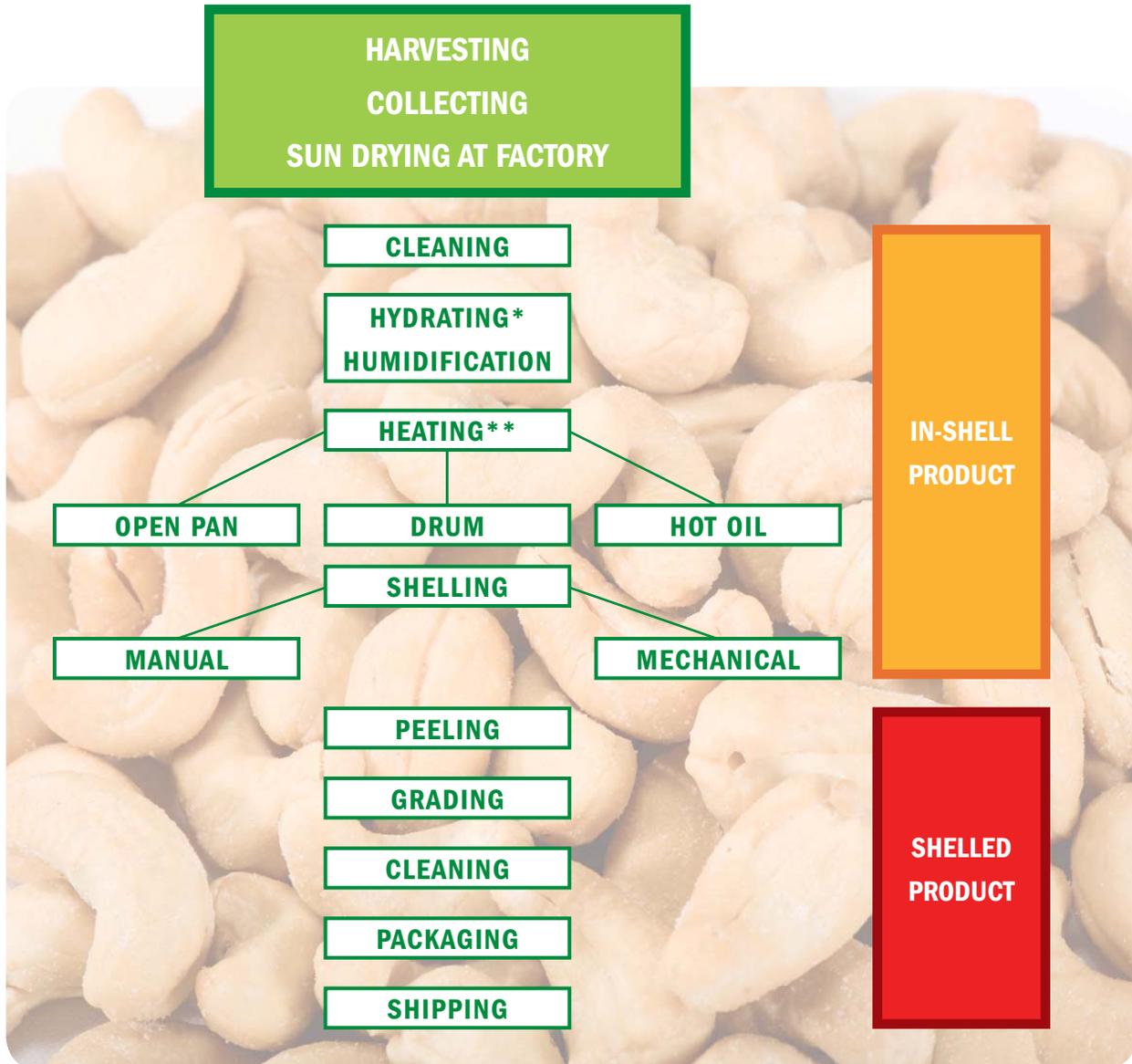
source: Red River; Industry, FAO



source: Red River; Industry, FAO

CASHEW PROCESSING

The method of cashew processing varies by country and often by factory within the producing origins. The accompanying chart depicts the general sequence of the raw seed/kernel processing. Once at the factory, the raw nuts are spread out so they may be sun-dried. Here the movement of the cashew faces a major hurdle: wet weather or cloudy weather will damage the nut and/or at least delay processing. Inside the factory, the nuts are hydrated and heated to soften the shell in preparation for the actual shelling. Common methods of heating include steam, drum, and hot oil heating. Shelling is performed mechanically or by hand. Most shelling in Brazil is done mechanically, which produces proportionately more broken grades. Most shelling in Vietnam, India, and Africa is done manually, hence outturn in those countries has a higher proportion of whole grades.



N.B.: Cashew processing varies by country of origin and by factory. This chart is intended to display a general overview of how cashews are processed prior to shipment.

* This is often referred to as “moisturizing”

** Industry sources sometimes refer to this step as “roasting.” Actual roasting prior to sales for consumption is done at roasting operations in the U.S. and other consuming countries.

CASHEW GRADING

CASHEW GRADES GENERAL CATEGORIES

WHITE WHOLE GRADES

w180	Super large; between 140 and 180 kernels per lb
w210	Between 190-210 kernels per lb
w240	Between 230-240 kernels per lb
w280	Between 270-280 kernels per lb
w320	Between 300-320 kernels per lb
w450	Between 400-450 kernels per lb

WHITE BROKEN GRADES

Pieces	Kernel broken across the section of the nut
Small Pieces	Kernel broken across the section of the nut, but smaller
Bits	Very small pieces
Butts	Kernel broken cleanly at the tip of the nut
Splits	Kernel broken lengthwise

SCORCHED GRADES

Wholes	Whole kernels slightly scorched
Butts	Butt pieces scorched
Splits	Split pieces scorched
Pieces	Pieces, excepting very small pieces, scorched

Cashews are graded into three *general* categories, based on size and condition: (1) White Wholes, (2) White Pieces, and (3) Scorched. White Wholes are graded according to size while White Pieces are sorted according to the way in which the kernels were broken. Scorched cashews are sorted according to the coloration or blemishing of the whole kernel or kernel piece. The accompanying chart summarizes the grading of kernels for export. (There are other whole grades, e.g., w360, w380, that “fit” between these major grades.)

Estimated Amount of Export-Quality Kernels

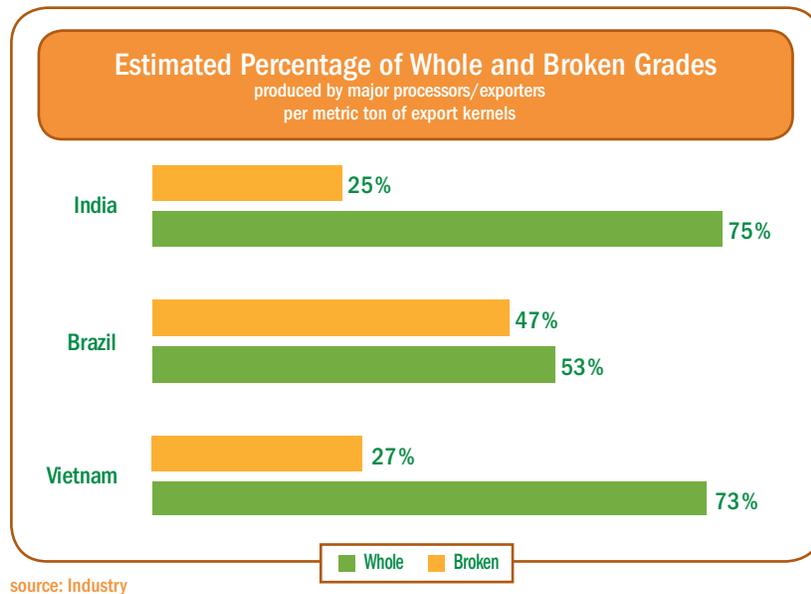
produced by major processors/exporters
per metric ton of raw cashew nuts

Processing Country	Country of Origin	kgs
India ▶	India (Kerala State)	250
	India (Country)	230
	Indonesia	240
	Guinea Bissau, Togo	240
	Ivory Coast, Benin	230
	Mozambique	230
	Senegal	220
	Nigeria, Kenya	200
Brazil ▶	Brazil	210
Vietnam ▶	Vietnam	230

The adjacent table displays the estimated average amounts (in kgs) of exportable grade kernels produced per metric ton from the three major exporting countries. These percentages may vary from year to year and even during the same season because of weather conditions, the quality of the seed, the time of the season when the crop is being processed, and the capabilities of the processor.

In India, for example, each metric ton of raw cashew seed produced and processed in that country yields, on average, about 230 kgs (23 percent) of exportable grade kernels. Thus, if an Indian crop were 600,000 metric tons of raw cashew nuts, and we applied the percentage yield for the country as a whole, the approximate outturn would be about 138 million kgs of exportable grade wholes and pieces.

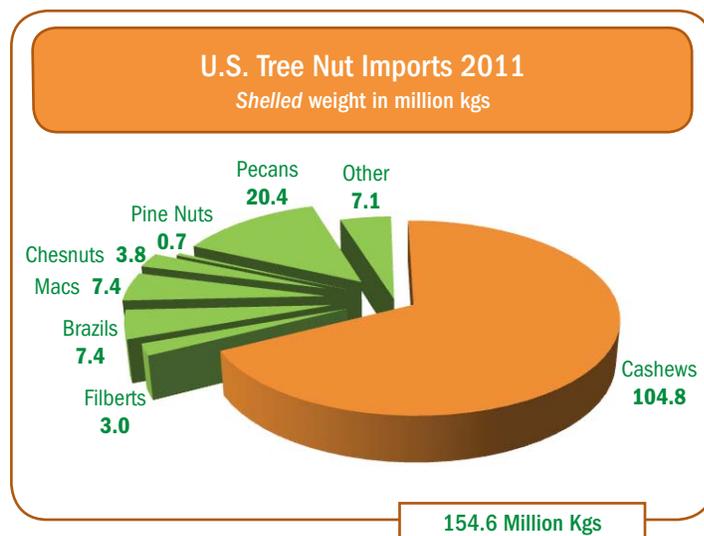
Generally, cashew kernel yields range from about 20 to 24 percent. Thus, one metric ton of raw cashews can yield between 200 and 240 kgs of edible kernel wholes and pieces after processing, depending on country of origin. A crop that yields 1 million kgs of cashew kernels, for example, might be estimated to have been 4.2 to 5.0 million kgs of raw seed production.



source: Industry

Because processing methods differ between Brazil on the one hand and India and Vietnam on the other, the percentage of whole/broken grades between Brazil and the other two major origins vary widely. (These percentages result after peeling losses and rejects are discounted.) The high percentage of broken grades in Brazil is the result of mechanical processing. Because most processing in India and Vietnam is done by hand, processing in those countries yields a higher percentage of whole grades.

U.S. IMPORTS FOR CONSUMPTION



source: U.S. Department of Agriculture

Cashews remain by far the single largest segment of U.S. shelled tree nut imports for consumption. As displayed in the table which follows, cashews consistently represent about two-thirds of all U.S. shelled tree nut imports for consumption. In 2011, cashew imports were about 105 million kgs, the lowest import total since 102 million kgs arrived in the U.S. in 2003. U.S. cashew imports for consumption in 2011, displayed in the accompanying pie chart, are representative of various nut import shares since the mid-1990s. (N.B.: The pie chart does not include tree nuts imported and shelled in the U.S., primarily pecans, or brazil nuts.) For the first five months of 2012, cashew imports were 41.6 million kgs vs. 43.5 million kgs during the same period in 2011. If the pace of imports during 2012 mirrors that of 2011, total imports for the year could be about 100 million kgs, considerably below the pace of the years 2004 through 2010.

U.S. <i>Shelled</i> Tree Nut Imports Million Kgs and Percent of Total					
	2007	2008	2009	2010	2011
Cashews	125.5	112.3	117.0	119.1	104.8
	71%	65%	68%	70%	68%
Pecans	18.7	26.5	22.6	17.3	20.4
	11%	15%	13%	10%	13%
Brazils	10.9	8.5	9.6	11.4	7.4
	6%	5%	6%	7%	5%
Macadamias	6.7	6.8	6.9	7.3	7.4
	4%	4%	4%	4%	5%
Chestnuts	4.1	4.1	4.9	4.9	3.8
	2%	2%	3%	3%	2%
Filberts	3.7	4.6	2.2	3.3	3.0
	2%	3%	1%	2%	2%
Pinenuts	4.3	5.2	3.1	1.2	0.7
	2%	3%	2%	1%	0%
Other	3.8	6.0	6.2	6.0	7.1
	2%	3%	4%	4%	5%
Total	177.7	174.0	172.5	170.5	154.6

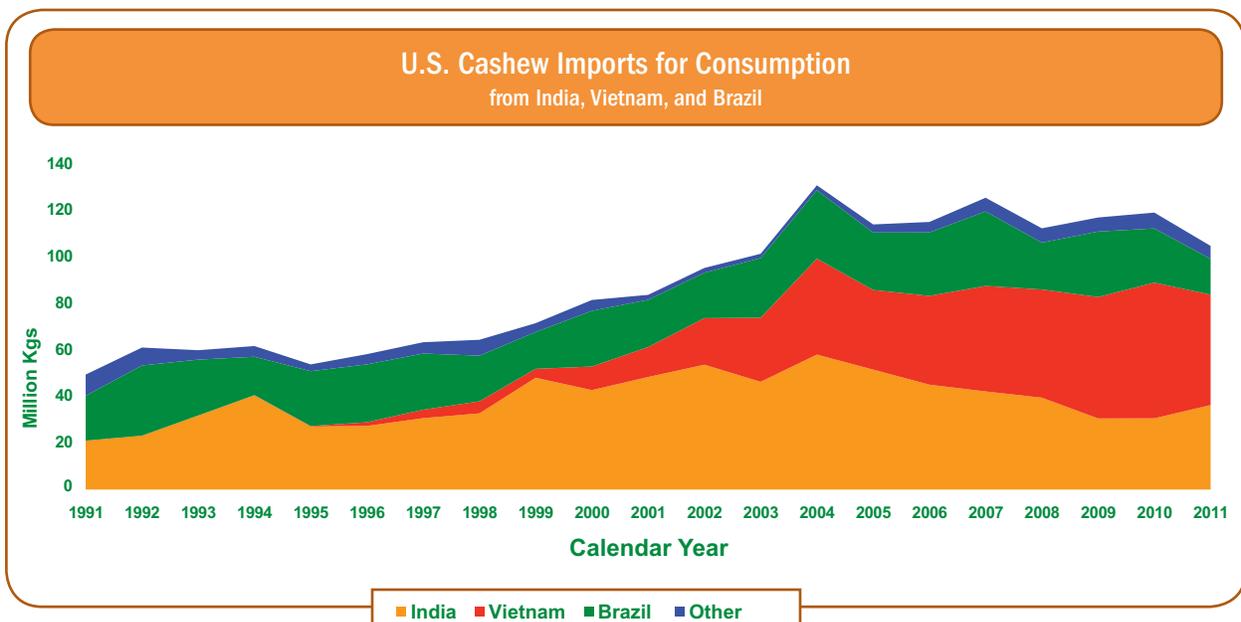
Source: U.S. Department of Agriculture

N.B.: 1. "Other" includes Almonds, Pistachios, Walnuts, and "Not Elsewhere Specified (NES)"

2. Pine Nuts appear to be underreported for both 2010 and 2011

In the early 1990s, the U.S. imported 50-60 million kgs of cashews annually, all from India and Brazil. In the ten years from 1990 through 1999, total U.S. cashew imports from all origins were just under 600 million kgs, an annual average of 60 million kgs. However, in the eleven years from 2000 to 2011, total imports soared to 1,301 million kgs, an average of 118 million kgs annually. During those eleven years, Vietnam accounted for 525 million kgs of the 1,301 million kg total, or 40 percent. India, earlier the principal source of U.S. cashews, accounted for 434 million kgs total or one-third of all imports over the same time period.

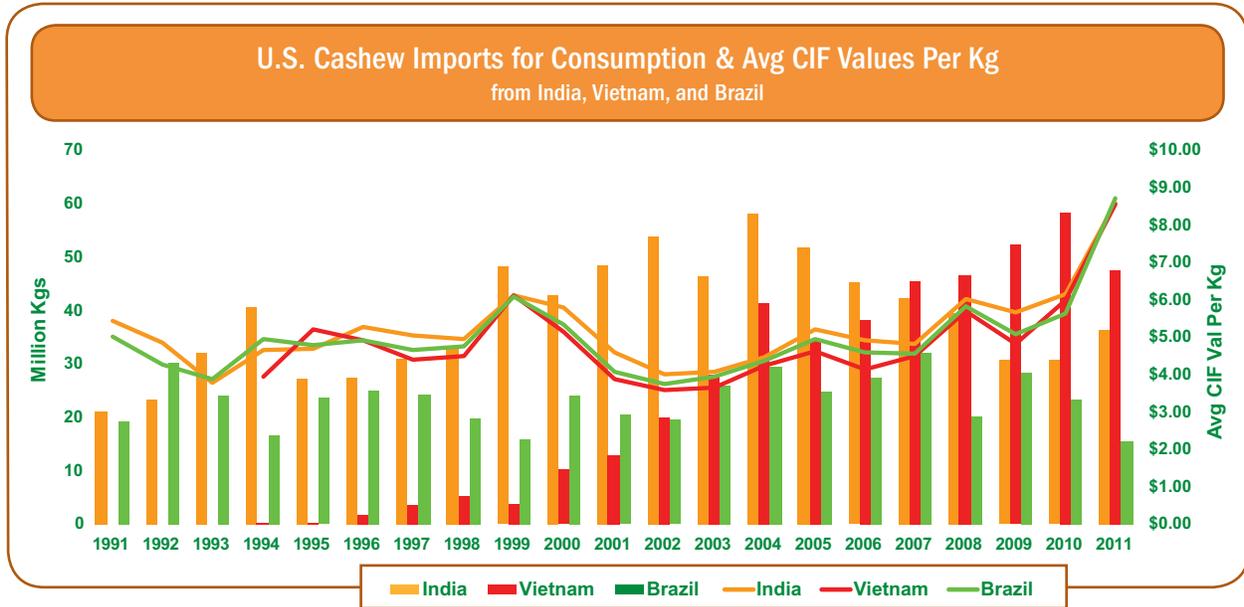
The graph below displays the trend of U.S. cashew imports from the major origins since 1990. Imports from Brazil have remained relatively steady, ranging from 19 to 32 million kgs, while imports from India and Vietnam have trended in opposite directions since 2007. India commanded over 50 percent of the U.S. import market until 2002, but that percentage slipped as Vietnamese exports increased. India's share fell to just under 40 percent in 2006 and was about 26 percent in 2009 and 2010. India's share did rebound in 2011 to 35 percent. Vietnam has been the main source of U.S. cashew imports since 2007, even though imports from Vietnam fell from 58.3 to 47.5 million kgs between 2010 and 2011.



source: U.S. Department of Agriculture

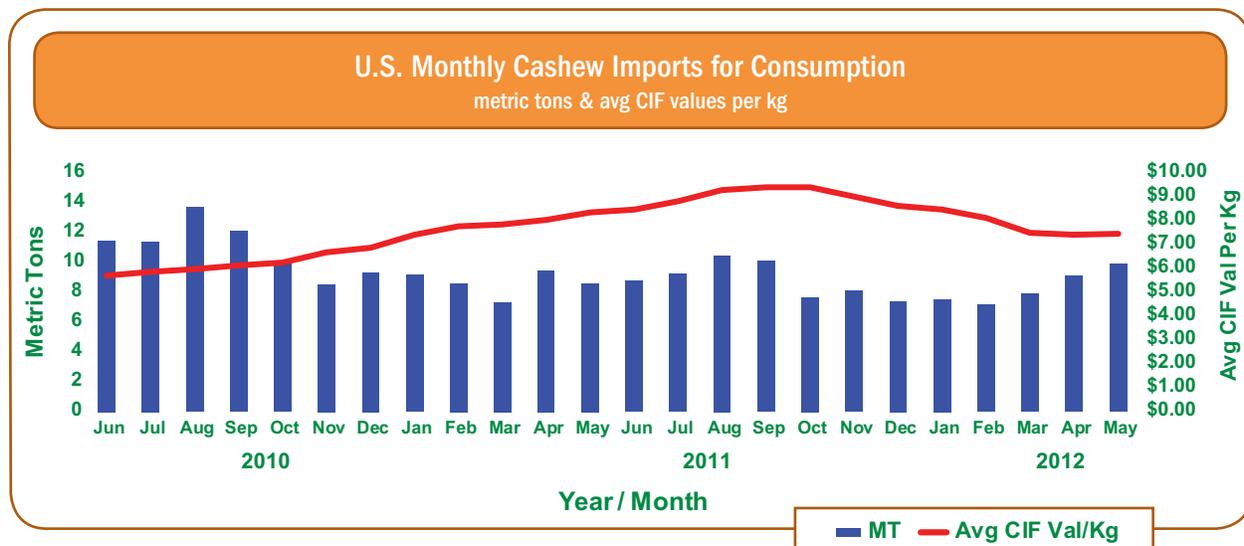
U.S. IMPORTS CONTINUED

The graph below depicts annual import volumes from each of the three major origins--Brazil, India, and Vietnam--and the average annual CIF values of those imports. Average CIF values from all three origins trended upward from 2003 to reach their peak values in 2011.



Source: U.S. Department of Agriculture

The high prices of 2011, which included a peak total monthly average CIF import value of \$9.41 during September, have eased during the past few months. The lower prices at origin are reflected in the March, April, and May 2012 average CIF import values, which ranged from \$7.41 to \$7.49 per kg.

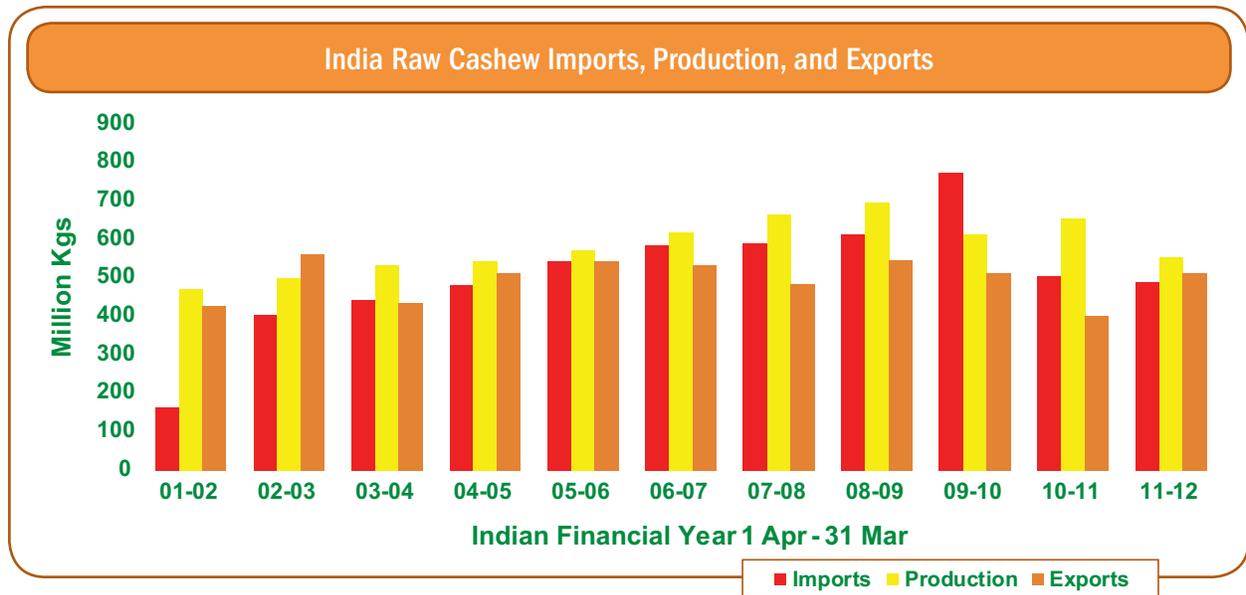


Source: U.S. Department of Agriculture

INDIA

Raw seed imports into India have been on the increase over the past decade as domestic demand has been rising. This has been fueled by higher per capita and disposable incomes among a growing middle class. The result has been expanded use of cashews as ingredients in confectioneries, bakery products, and cuisines. Some estimates put the annual rate of increase in domestic consumption at more than 10 percent. Higher domestic consumption has been accompanied by a general decline in exports in the past few years. Imports first surpassed exports during 2003-2004 and with only two exceptions, 2004-2005 and 2011-2012, have done so in all years since then.

The manner in which the Indian cashew situation is evolving is affecting the entire international market. With less product available from India for export, the industry must look to additional sources of raw product, and Africa is garnering much attention as that other source.



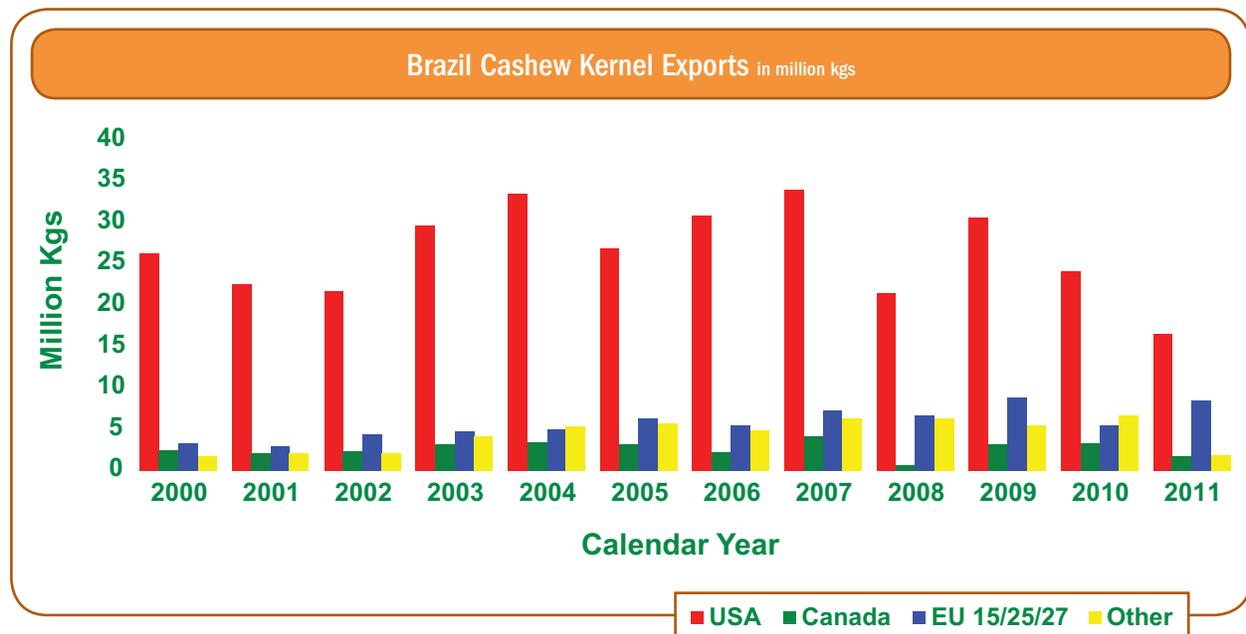
Source: Indian Ministry of Agriculture, Industry
 N.B.: 1. All data are in RCN
 2. Exports estimated under assumption that raw to kernel yield is 0.23
 3. Export data represent exports from all ports

Sun drying raw seed in India A sample of Indian cashew imports... They may not arrive in a bag labeled "cashews"!



BRAZIL

Brazilian production levels have been unstable for the last eight to nine years, reaching 300 or more million kgs in some years (2005, 2007, and 2009) and then falling off 50 to 100 million kgs in subsequent years. Two successive short crops occurred in 2010 and 2011, reaching a low of 155 million kgs last year. The uncertainty surrounding production levels has led Brazilian processors to seek additional supplies in West Africa. Because of the extremely short Brazilian 2010/2011 crop, exports declined dramatically last year, registering only 26 million kgs, the lowest total since 24 million kgs were exported in 1999. The 2011 export total represented a 38 percent drop from the 42 million kgs exported in 2010. Exports to the U.S. were down nearly 8 million kgs and exports to the European Union were off by 3 million kgs. Yet, the U.S. and EU continued to account for roughly 60 and 20 percent of all Brazilian exports, respectively.



Source: Brazilian Industry

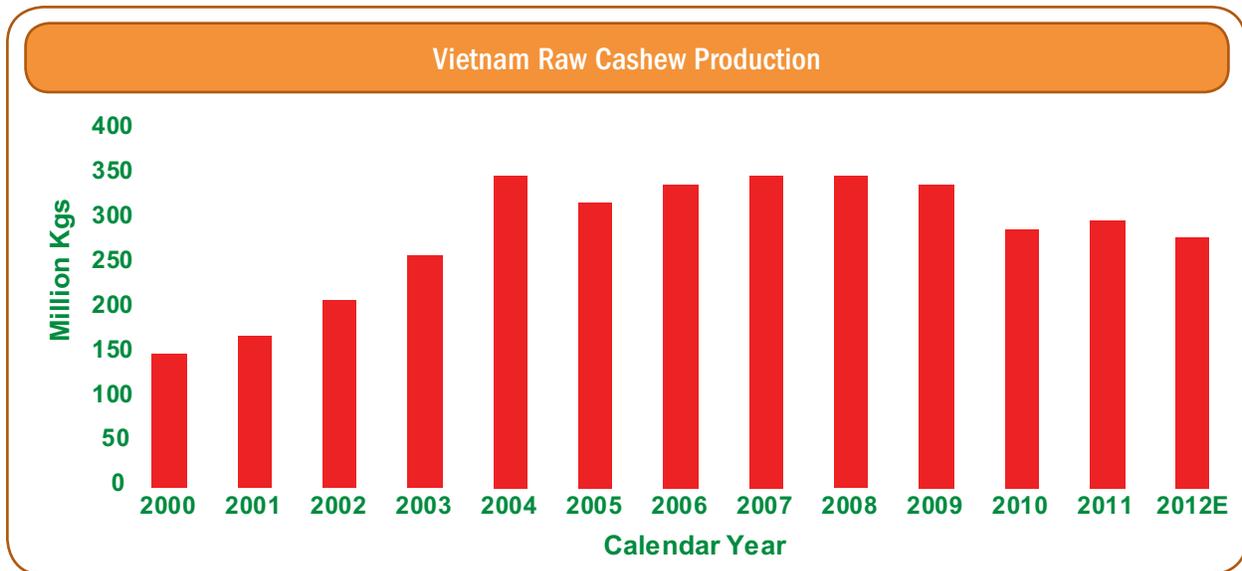
N.B.: 1. The EU consisted of 15 countries thru 2003; in 2004 membership increased to 25 countries; in 2007 membership increased to 27 countries.

Sorting Cashews in Brazil



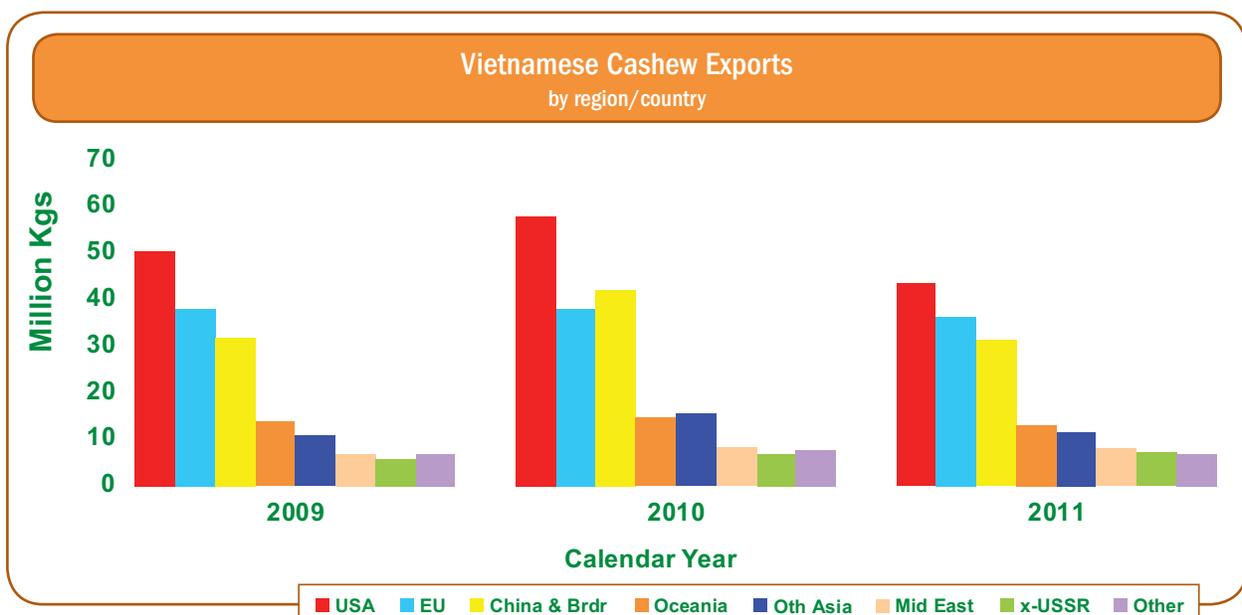
VIETNAM

Vietnamese production has been below expectations for the last three years after steadily increasing to the 320-350 million kilo level from 2004 to 2009. The shorter-than-expected crops have prompted Vietnam to increase its imports of raw seed to meet export demand.



Source: Industry

Vietnamese exports fell over 30 million kgs between 2010 and 2011, from 191 to 157 million kgs, including a decline of 11 million kgs in cross-border trade with China. Shipments to the European Union (EU) during these two years were roughly the same at 38 and 36 million kgs, respectively, but exports to the U.S. fell from 58 to 44 million kgs. Still, the U.S. was the major destination for Vietnamese exports in 2011. Exports to the former USSR and the Middle East (including Turkey), though relatively minimal, were about 7 and 8 million kgs, respectively, in both 2010 and 2011. The China cross-border trade was off 25 percent, from 39.4 to 29.7 million kgs.



N.B.: Middle East includes Turkey
Source: Industry

VIETNAM CONTINUED

Vietnam Cashew Exports by Grade Million Kgs & Percent Total						
	2009		2010		2011	
	Mn Kgs	%	Mn Kgs	%	Mn Kgs	%
Wholes	96.1	71%	110.3	73%	93.0	73%
Pieces	37.8	28%	39.6	26%	33.9	26%
Other	1.0	1%	1.2	1%	0.6	1%
Total	134.9		151.1		127.5	

Source: Vietnamese Industry

N.B.: 1. "Pieces" includes Splits and Butts.

2. Excludes Cross-Border trade with China: 28.6 mn kgs in 2009, 39.4 mn kgs in 2010, and 29.7 mn kgs in 2011.

Vietnamese export grades continue to consist of 70+ percent wholes and about 27 percent pieces. Excluding the cross-border trade with China, white wholes accounted for about 70 percent of Vietnamese exports in 2011; within this category 320s, 240s, and 450s represented 48, 17, and 5 percent, respectively, of all exports. Lightly blemished, scorched, and dessert wholes combined accounted for only 3 percent of total exports, down from 10 percent in 2009 and 6 percent in 2010. Large pieces were 9 percent and splits 13 percent. Exports of 320s as a percentage of total exports rose from 41 percent in 2009 to 44 percent in 2010 before reaching 48 percent in 2011.



N.B.: Excludes China Cross-Border trade of 29.7 million kgs

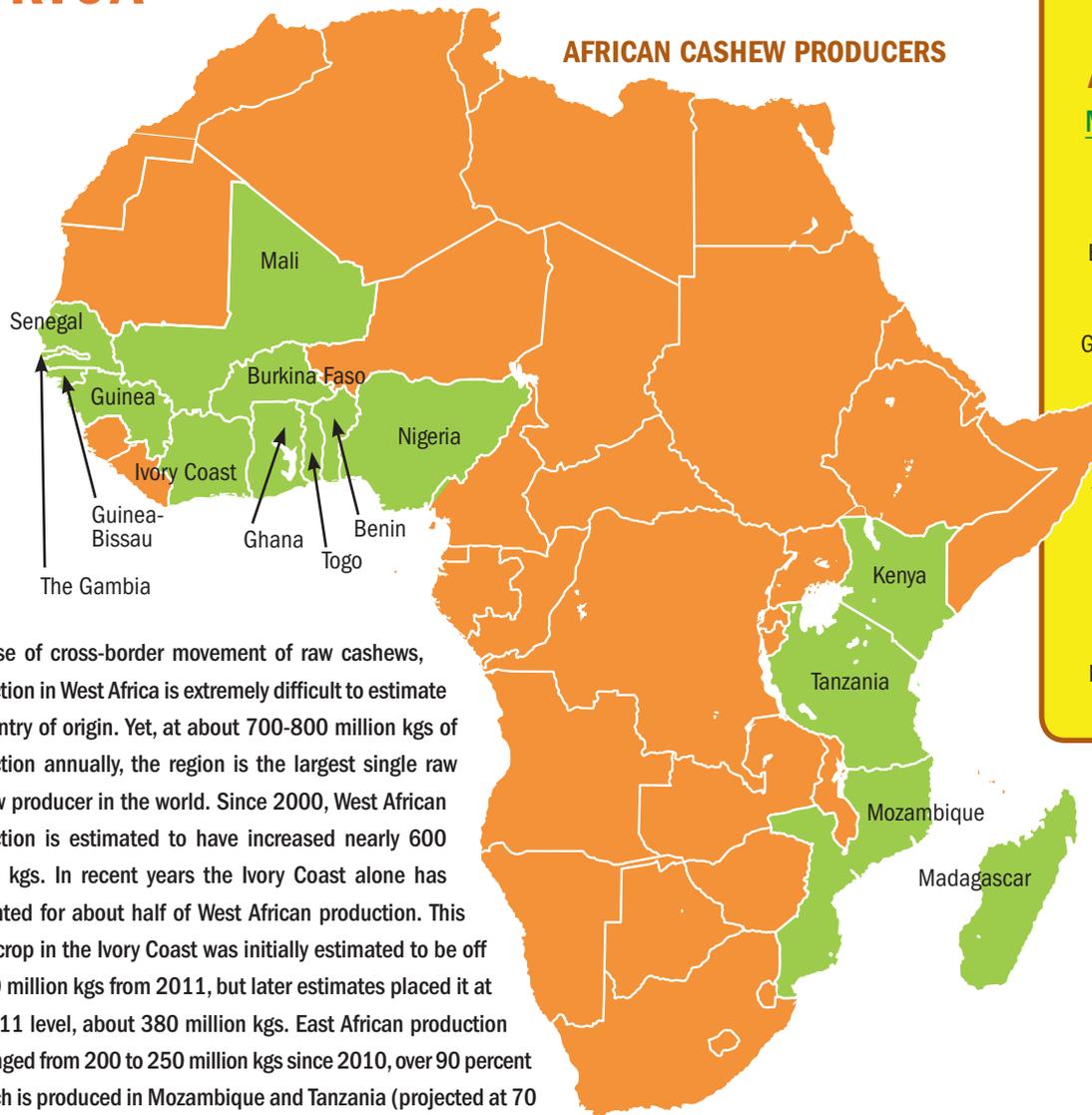
Hand cracking cashew seed in Vietnamese factory



Peeling and grading in Vietnamese factory



AFRICA



AFRICAN CASHEW ALLIANCE MEMBERS

West

- Benin
- Burkina Faso
- Ghana
- Guinea
- Guinea-Bissau
- Ivory Coast
- Mali
- Nigeria
- Senegal
- The Gambia
- Togo

East

- Kenya
- Mozambique
- Tanzania

Because of cross-border movement of raw cashews, production in West Africa is extremely difficult to estimate by country of origin. Yet, at about 700-800 million kgs of production annually, the region is the largest single raw cashew producer in the world. Since 2000, West African production is estimated to have increased nearly 600 million kgs. In recent years the Ivory Coast alone has accounted for about half of West African production. This year's crop in the Ivory Coast was initially estimated to be off by 100 million kgs from 2011, but later estimates placed it at the 2011 level, about 380 million kgs. East African production has ranged from 200 to 250 million kgs since 2010, over 90 percent of which is produced in Mozambique and Tanzania (projected at 70 and 120 million kgs for 2012, respectively.)

Cashew seedlings, an African investment in Africa's Cashew future



AFRICA CONTINUED

The African cashew industry is not yet “on the verge” of rapid expansion, but the industry’s accelerating interest—and investment—in both West and East Africa, portends growth in all sectors of the African cashew market, from production to processing to export. Growing domestic consumption in Asia (primarily India and China) and the annual uncertainties of crop sizes/quality in major origins caused by weather variations have led the industry to seek additional sources of supply—and Africa is the logical source of new supplies.

The African industry requires long-term investment in value-added infrastructure, from growing and harvesting to processing and marketing. For at least the next few years, the lack of processing capacity will remain the single biggest hurdle that must be overcome in the African industry. The bulk of African production is processed in India and Vietnam. Only about 10 percent of the production in West Africa is now processed in that region. For the 200-250 million kgs produced in East Africa, processing capacity is variously estimated at 35 to 50 million kgs, with most of that in Mozambique.

Numerous parties are working to build the African cashew industry. The African Cashew Alliance (ACA) is the focal point for individual companies; non-profits; and various government agencies, including the U.S. Peace Corps. The ACA was organized in 2005 and is headquartered in Accra, Ghana. The general goal of the ACA is to promote the African cashew industry, with a particular focus on expanding the processing sector and improving quality. The Alliance’s objectives are: (1) to increase the processing of cashews in Africa, (2) to improve competitiveness and sustainability of the African cashew industry, and (3) to facilitate public-private cooperation for the cashew sector.

Reopening of Muskaan Plant in Ghana

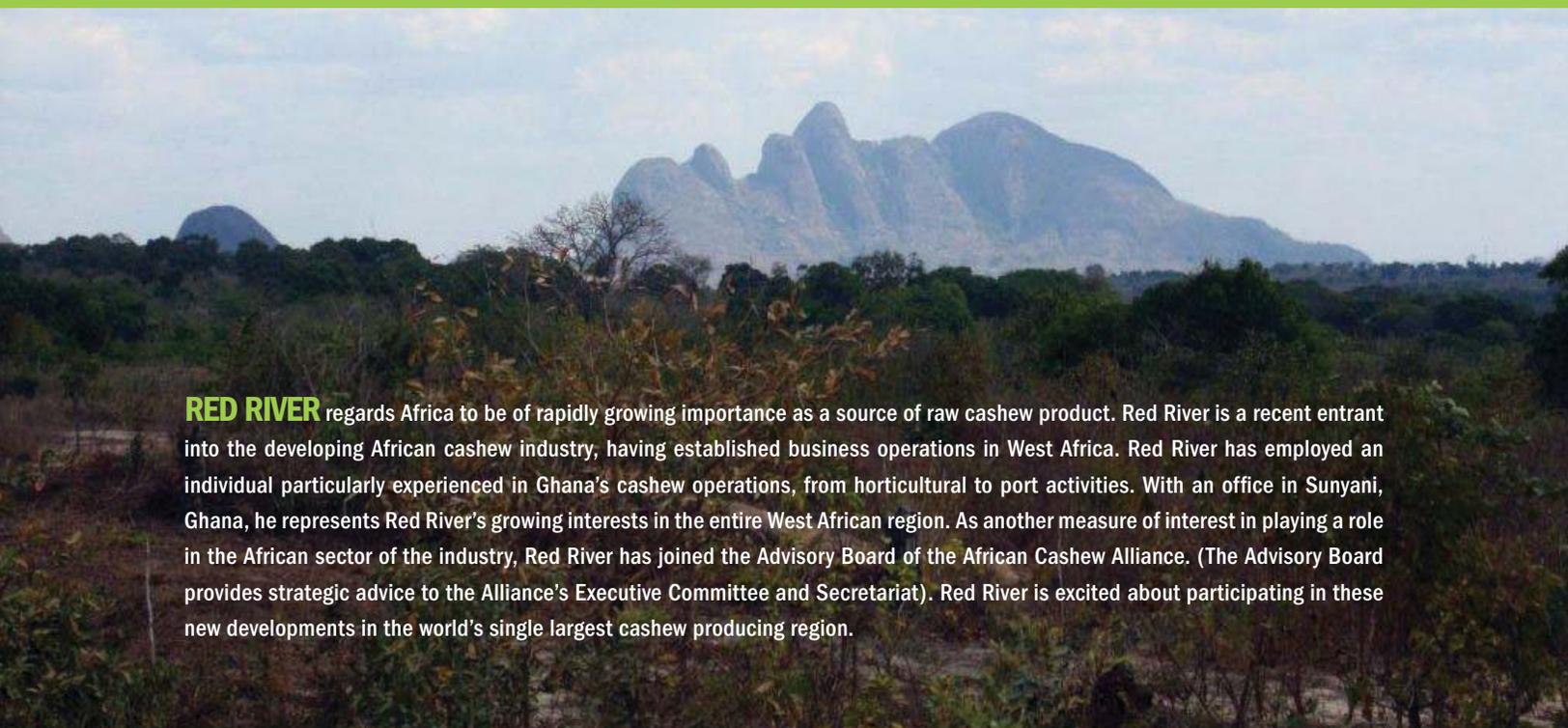


In 2009 the ACA helped steer a \$25 million grant from the Gates Foundation to Benin, Burkina Faso, Ivory Coast, Ghana, and Mozambique for development of their respective industries. Later that year the Alliance received a grant from USAID/West Africa to assist cashew entrepreneurs in the region obtain access to financing. In March 2012 the ACA, the US Agency for International Development Trade Hub, and the African Investors Management Services Ltd on the one hand and the Nigerian Export Import Bank and Ecobank (a regional commercial bank) on the other reached an agreement to obtain access to financing for three Nigerian processing firms. In all of these instances the ACA has been a convenient and effective facilitator, helping to move the African cashew industry forward.

Drying Yard in Africa



African Landscape

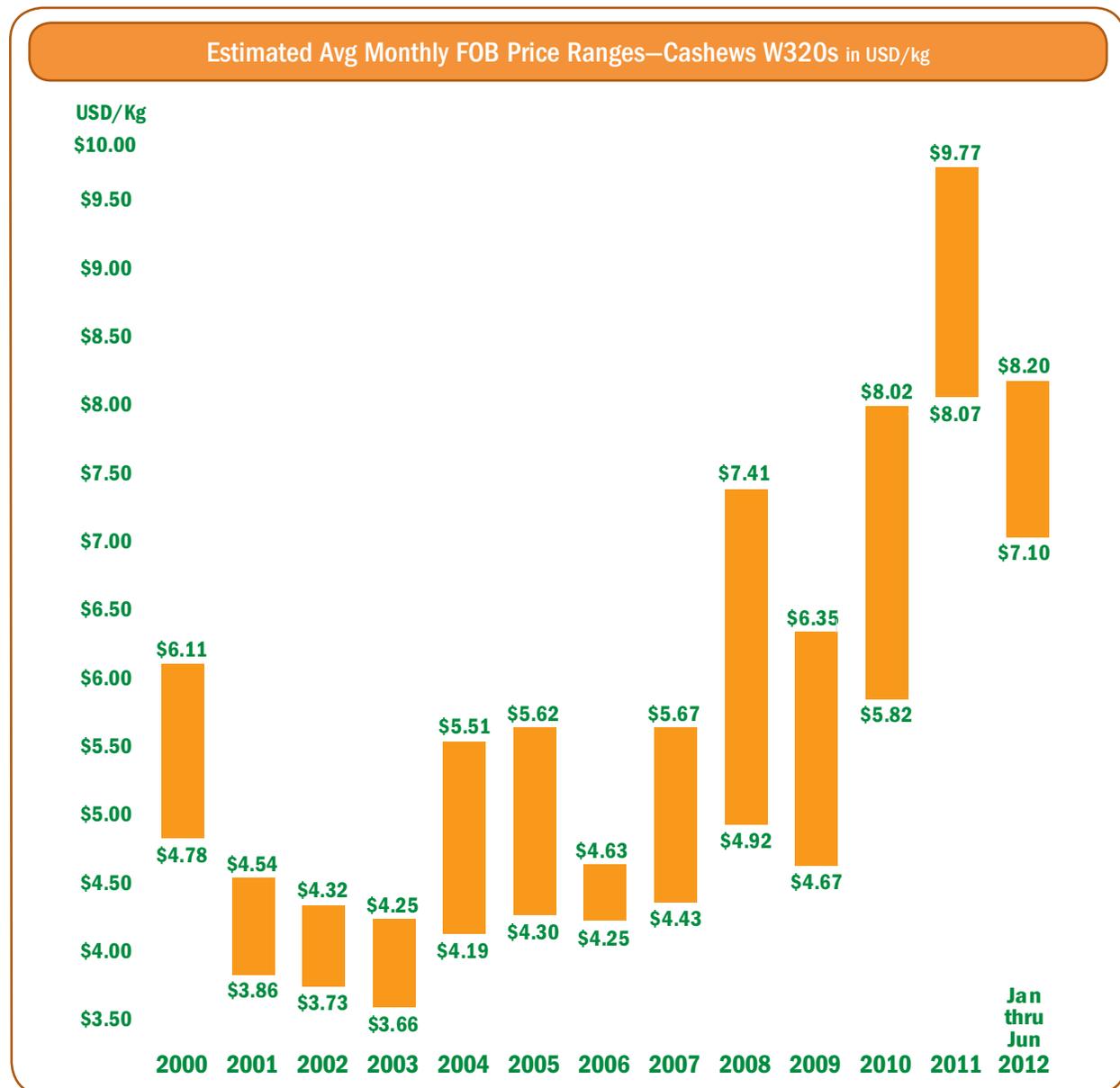


RED RIVER regards Africa to be of rapidly growing importance as a source of raw cashew product. Red River is a recent entrant into the developing African cashew industry, having established business operations in West Africa. Red River has employed an individual particularly experienced in Ghana's cashew operations, from horticultural to port activities. With an office in Sunyani, Ghana, he represents Red River's growing interests in the entire West African region. As another measure of interest in playing a role in the African sector of the industry, Red River has joined the Advisory Board of the African Cashew Alliance. (The Advisory Board provides strategic advice to the Alliance's Executive Committee and Secretariat). Red River is excited about participating in these new developments in the world's single largest cashew producing region.

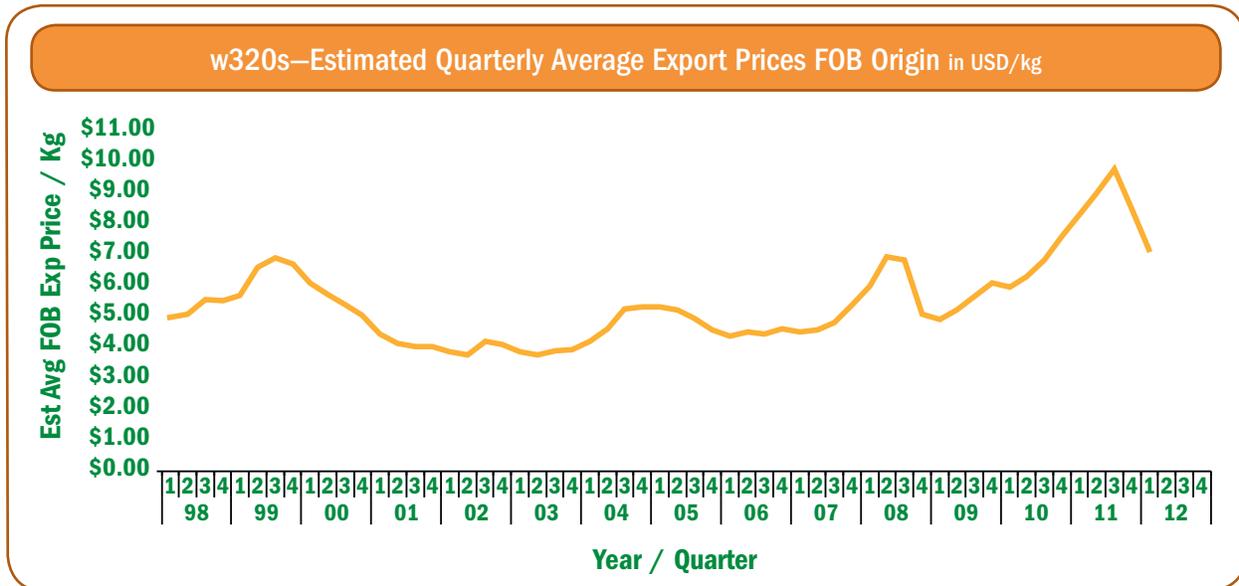
PRICE RANGES/VOLATILITY

The one constant feature of the international cashew market in the past few years has been price volatility. This is illustrated not only by high prices but also by the varying price ranges between the monthly average low and high FOB export prices each year. In the six years from 2000 through 2006, the average FOB monthly low-high price range for W320s was estimated at \$.89 per kg. In the five years from 2007 through 2011, the estimated monthly average low-high price range was an estimated \$1.86 per kg.

After shifting upward in 2004 and 2005, average monthly FOB export prices fell back in 2006 as supplies increased. However, prices began to increase again in mid-2007 as Vietnamese and Indian shippers delayed and then defaulted on their contracts. By year's end, the average monthly FOB export price had risen to nearly \$5.70 per kg. By mid-2008, prices had surged to \$7.40 per kg. The causes were numerous: a short crop in Brazil; new and inexperienced processors in Vietnam; and Vietnamese/Indian defaults, demands for renegotiated contracts, and shipping delays. However, monthly average prices did fall back to just under \$5.00 per kg by the final months of 2008. Prices began another upward swing in mid-2009 and continued through 2011. By December 2011, the average monthly FOB export price for W320s was nearly \$9.80 per kg, a record high, making the price range for the year \$1.70. The average monthly low-high price range for the January to March 2012 period was only \$0.15 per kg (\$7.10-\$7.25), but jumped to \$1.10 per kg (\$7.10-\$8.20) for the January to June 2012 period because of higher prices during May.



PRICE TRENDS



source: Industry

The accompanying graph displays the estimated quarterly average FOB export price movement of W320 cashews since 1998. The price spike in 1999—which now seems to have been minor when compared with the price spike in 2011—was caused by crop shortfalls and processors contracting in advance for more product than they were able to deliver. Many processors defaulted on their commitments, leaving importers with an eleventh hour need to fulfill their own obligations. The result was extremely strong demand which led to intense upward pressure on prices. The price plunge in 2000 reflected higher worldwide supplies. The estimated average quarterly prices fell to about \$4.40 per kg by 2001, and remained at historic lows, between \$3.75 and \$4.20 per kg, through 2003. Thus, the market was relatively stable for these three years.

Cashew prices began increasing in early 2004 in part because Indian packers sought higher prices. The Indian example was followed by Vietnamese packers. The price increase was also a reflection of the higher prices being paid for all nut products. By the end of 2004 and early 2005 the estimated average FOB quarterly price was \$5.30 per kg. Prices began to decline in late 2005 and from then until mid-2007 the estimated monthly price ranged from about \$4.30 to \$4.60 per kg. This relatively low price in the first two quarters of 2007 was attributed in part to the sale of large quantities of India's 2006 crop to make way for the even bigger 2007 crop of 620 million kgs.

Prices rose sharply beginning in mid-2007, reached a quarterly high of more than \$6.90 per kg in the second quarter of 2008, matching the 1999 price peak, and then began to abate. The jump in prices originated with Vietnamese shippers. Faced with higher than expected raw cashew prices, some delayed and then defaulted on shipments, forcing buyers to bid up prices. Yet, what goes up must come down, and by the last quarter of 2008, the average quarterly FOB price had declined to just above \$5.00 per kg. Prices began increasing again in mid-2009, exceeding \$6.00 per kg by the end of that year, accelerated to \$7.60 during the last quarter of 2010, and surged to an estimated quarterly average of \$9.75 per kg in the third quarter of 2011.

The causes of the unprecedented increases in 2011 were many: shortfalls in both the Vietnamese and Brazilian crops, rising Indian domestic consumption, higher African raw seed prices, and continued strong world demand. Beyond these pressures, however, has been the recurring problem of Vietnamese and Indian suppliers defaulting on and delaying shipments to obtain higher prices as markets have risen. This effort to extract higher than agreed-upon prices has backfired on some suppliers because they have not been able to move the high-priced inventories they have accumulated, and some have gone out of business as a result. The abnormally high prices in 2011 have resulted in a decline in U.S. consumption, readily apparent in the lower U.S. import totals in 2012. Yet, this is to be expected, for U.S. demand responds to price changes. In turn, this led to a decline in prices in late 2011 and generally continued into 2012. Some Indian and Vietnamese suppliers still have not fully understood this relationship between their high prices and U.S. demand.

PRODUCTION ESTIMATES in million kgs

Region / Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012E
Asia													
Cambodia	10.0	20.0	25.0	30.0	35.0	40.0	45.0	50.0	50.0	50.0	60.0	60.0	60.0
India	520.0	450.0	470.0	500.0	535.0	544.0	573.0	620.0	665.0	695.0	613.0	653.0	554.0
Indonesia	69.9	91.6	110.2	106.9	131.0	135.1	149.2	154.8	157.4	155.0	145.0	142.0	125.0
Philippines	10.1	10.0	10.0	10.1	10.0	10.0	10.0	11.3	11.2	11.2	13.5	13.5	13.5
Sri Lanka	4.7	6.2	6.4	6.5	6.5	6.2	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Thailand	4.8	4.7	4.7	4.7	4.6	4.7	4.7	4.7	5.0	5.0	5.0	5.0	5.0
Vietnam	150.0	170.0	210.0	260.0	350.0	320.0	340.0	350.0	349.0	340.0	290.0	300.0	280.0
Other	12.0	12.0	12.1	11.9	12.0	12.0	12.1	12.0	12.1	12.0	12.0	12.0	12.0
Sub-Total, Asia	781.5	764.5	848.4	930.1	1,084.1	1,072.0	1,140.0	1,208.8	1,255.7	1,274.2	1,144.5	1,191.5	1,055.5
Africa West													
Benin	30.0	35.0	43.1	40.0	43.0	43.0	37.5	37.5	45.0	100.0	70.0	90.0	85.0
Ghana	5.5	5.0	5.2	5.2	10.0	10.0	10.0	12.5	12.5	12.5	12.0	12.0	27.0
Guinea-Bissau	72.7	70.0	70.0	75.0	92.0	100.8	100.0	100.0	100.0	136.0	150.0	130.0	160.0
Ivory Coast	60.0	100.0	104.8	120.0	150.0	200.0	250.0	290.0	320.0	350.0	335.0	385.0	380.0
Nigeria	30.0	30.0	40.0	50.0	50.0	60.0	75.0	80.0	81.0	100.0	70.0	85.0	85.0
Senegal	6.8	3.2	4.0	6.0	8.5	12.0	15.0	17.5	20.0	20.0	35.0	35.0	30.0
Other	8.1	8.7	9.2	11.5	14.0	19.5	21.8	22.0	23.5	29.5	28.0	29.5	37.0
Sub-Total, Afr W	213.1	251.9	276.3	307.7	367.5	445.3	509.3	559.5	602.0	748.0	700.0	766.5	804.0
Africa East													
Kenya	5.1	10.1	4.1	5.2	5.2	5.2	1.0	5.0	5.0	8.5	11.0	8.0	9.0
Madagascar	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Mozambique	52.6	52.1	50.2	63.8	42.3	104.4	62.8	74.4	64.2	95.0	113.0	64.0	70.0
Tanzania	121.2	122.3	67.4	92.2	78.6	71.9	77.4	92.6	99.1	75.0	120.0	157.0	120.0
Sub-Total, Afr E	182.9	188.5	125.7	165.2	130.1	185.5	145.2	176.0	172.3	182.5	248.0	233.0	203.0
Latin America													
Brazil	210.0	200.0	190.0	230.0	260.0	300.0	265.0	320.0	240.0	320.0	200.0	155.0	265.0
Peru	2.7	2.5	2.1	2.2	2.4	2.2	2.2	2.3	2.3	2.3	2.1	2.3	2.0
Other	4.2	4.2	4.6	4.5	4.3	4.2	4.3	4.4	4.5	4.6	4.6	4.6	4.6
Sub-Total, LatAm	216.9	206.7	196.7	236.7	266.7	306.4	271.5	326.7	246.8	326.9	206.7	161.9	271.6
World Total	1,394.4	1,411.6	1,447.1	1,639.7	1,848.4	2,009.2	2,066.0	2,271.0	2,276.7	2,531.6	2,299.2	2,352.9	2,334.1

N.B.: Production estimates for any one country can and often do vary greatly. Thus, many estimates here are derived by extrapolation, interpolation, and "best guesses," while other estimates derived from known and reliable sources are reasonably accurate. Until there is a willingness on the part of responsible industry and government parties at origin to venture their best estimates, the industry will be hampered in assessing available supplies.

Red River Foods is pleased to provide information about the world cashew trade. The information and data herein represent estimates from a variety of sources as well as our own estimates. We wish to extend our grateful appreciation to the many individuals who helped make this brochure possible by contributing to our research. The company makes no warranty about the accuracy of these data and assumes no duty to update any materials contained in this report. Within the industry it is generally accepted that production, export, and other data can be understated, overestimated, or even unreported.

Red River wishes to emphasize that unforeseen events caused by political, legal, economic, or other circumstances, as well as weather conditions, could affect current expectations for any one market or for the world situation generally. Readers should not unduly rely on any estimates, forward-looking statements, or data cited herein to reach conclusions or make decisions about the various markets or market prices.



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