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# CASHEW PROCESSING, MARKETING, & CONSUMPTION IN WEST AFRICA

## CURRENT STATUS AND OPPORTUNITIES

*WATH/Accra Technical Report No. 22*

**MAY 2007**

This publication was produced for review by the United States Agency for International Development. It was prepared by Nicolas Boillereau and Brook Adam, consultants to the West Africa Trade Hub/Accra, under the direction of Cilia de Cock, manager of the African Cashew Alliance Secretariat at WATH/Accra, and John Holtzman, technical advisor at Abt Associates.

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## **DISCLAIMER**

The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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# ACRONYMS AND EQUIVALENCIES

<b>ACA</b>	African Cashew Alliance
<b>AGOA</b>	African Growth and Opportunity Act
<b>Cedis</b>	Ghana currency
<b>CNSL</b>	cashew nut shell liquid
<b>FCFA</b>	<i>Franc Communauté Financière Africaine</i> – currency used in 8 of the 10 countries studied
<b>g</b>	gram
<b>GTZ</b>	<i>Deutsche Gesellschaft für Technische Zusammenarbeit</i> – German development organization
<b>ha</b>	hectare
<b>kg</b>	kilogram
<b>MBA</b> s	Masters of Business Administration
<b>MT</b>	metric ton
<b>NA</b>	not available
<b>NACC</b>	Nigerian American Chamber of Commerce
<b>PAMER</b>	<i>Projet d'Appui Aux Micro Entreprises Rurales</i> – a project funded by the International Fund for Agricultural Development
<b>PHCCIMA</b>	Port Harcourt Chamber of Commerce, Industry, Mines and Agriculture
<b>SNV</b>	<i>Stichting Nederlandse Vrijwilligers</i> – Dutch development organization
<b>TIPCEE</b>	Trade and Investment Program for a Competitive Export Economy – a USAID/Ghana-funded project
<b>USAID</b>	United States Agency for International Development
<b>USD</b>	United States dollar (\$)
<b>\$</b>	United States dollar
<b>WA</b>	West Africa

## Equivalencies:

1 acre = 4,046 m<sup>2</sup>

1 hectare = 100 x 100 m = 10,000 m<sup>2</sup>

1 kg = 2.2 pounds

1 MT = 1,000 kg

500 CFA = \$1.00

9,250 cedis = \$1.00

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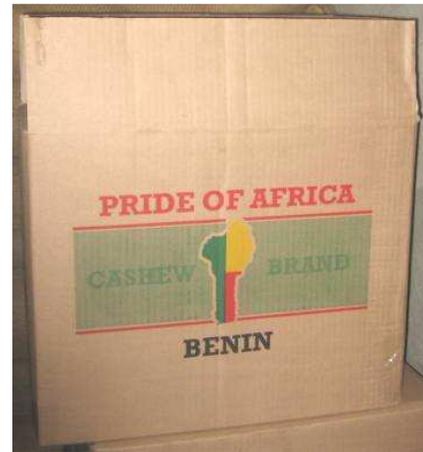
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Finally, the authors take full responsibility for any errors of omission or interpretation. Data, especially precise figures for sales and consumption of cashews, are rare and difficult to confirm in West Africa.

# EXECUTIVE SUMMARY

Less than 10% of the 475,000 MT of raw cashews produced in West Africa are processed locally, a surprisingly small percentage given the region's status as the world's second largest producer of raw cashews in 2006.<sup>1</sup> The local processing industry consists of industrial processors (processing more than 1,000 MT of raw nuts/year) mainly targeting the bulk export market, semi-industrial facilities selling mainly in local markets, and cottage processors—informal groups that process irregularly without investments in equipment, buildings, etc., and that sell locally.

Exporting cashew kernels requires volume. The international market buys predominantly full container loads of cashew kernels, packaged in 50-pound boxes. Filling one container of 20-foot (6.1m) necessitates loading 15+ MT of processed cashew kernels (approximately 700 boxes). Fifteen MT of cashew kernels means processing 75 MT of raw cashew nuts, since the kernels make up about 20% of the raw nut on average. Thus, in order for a processor to consistently sell cashew kernels throughout the year, significant capacity is needed. For example, a capacity of 1,000 MT is the minimum needed for a processor to fill just one container per month.



**Processed Beninese cashews  
for bulk export in 50-pound boxes**

Additionally, all processed cashews often cannot be sold in one container, as cashew kernels are sold in 26 different grades, and buyers prefer to have as few different grades as possible per container. With relatively limited volume, it is difficult for a processor to sell all 26 grades internationally while also fulfilling buyers' conditions to include a limited number of grades per container. At this point, a local market for some of the grades is crucial for the processor to achieve profitability. And for smaller scale processors, who cannot export in bulk, the local market is their only sales outlet.

Thus, increasing cashew consumption rates in the national and regional markets will help larger processors improve profitability by enabling them to sell grades not included in their regular shipments while helping smaller processors expand their businesses.

This study is meant to be a tool for those cashew processors who want to increase their sales in the regional West African market. If international companies manage to sell other products on every street corner and realize substantial turnover, African cashew processors can do the same. Cashews, widely appreciated in the subregion, are healthy and can compete with other snacks, such as potato chips or plantain chips.

The West Africa Trade Hub/Accra (WATH/A) and the African Cashew Alliance (ACA) initiated and coordinated this study. Field research in 10 different countries was financed and/or conducted by different partner organizations on the ground.<sup>2</sup> Researchers interviewed managers of supermarkets, small shops and roadside stands, service stations, hotels, restaurants, and airport shops (addresses are included at the end of individual country reports, available as separate documents.) Researchers also interviewed consumers in hotels and supermarkets and conducted a consumer panel in which different cashews were evaluated on taste, packaging, and price.

<sup>1</sup> Cashew production rankings are usually done by country. For the purpose of this study, the authors found that the cumulative production in West African countries ranked just below India's total production.

<sup>2</sup> For a full list see Table 2 in this document.

**Table 1. Summary processing and retail information by country (as of 2007).**

	Raw nut production MT*	Number of processors		Processing capacity MT	MT processed in 2006	Avg. kernel price/kg (\$) supermarkets
		Large	Small			
<b>Benin</b>	45,000	1	5	1,730	30-50	\$13.34
<b>Burkina Faso</b>	< 15,000	1	2	2,000	500	\$12.01
<b>Côte d'Ivoire</b>	200,000	2	3	10,100	> 5,000	\$20.22
<b>Ghana</b>	15,000	0	10	530	350	\$20.70
<b>The Gambia</b>	< 5,000	0	1	-	-	\$20.37
<b>Guinea-Bissau</b>	100,000	3	26	4,080	-	\$12.18
<b>Mali</b>	< 5,000	0	0	-	-	\$9.96
<b>Nigeria</b>	70,000	6	3	23,600	14,750	\$17.69
<b>Senegal</b>	15,000	0	15	350	-	\$16.94
<b>Togo</b>	< 5,000	0	1	80	80	\$16.36
<b>Total</b>	<b>&lt; 475,000</b>	<b>13</b>	<b>65</b>	<b>42,470</b>		<b>\$15.88</b>

\* No official statistics exist for raw nut production in any of these countries. These numbers are estimates based on recent studies and interviews with traders.

Average prices for cashew kernels in West African markets are similar to those in Europe and the U.S., indicating that cashews are relatively expensive in West Africa given local economies. Although cashews are well-known and appreciated by West African consumers, price limits growth in sales (except in Nigeria, where quality is perceived as the main limitation). Reasons for the high prices include the small scale of many processing facilities that supply the local market, inefficient distribution methods, high transport costs, high packaging costs, and suboptimal sales of broken nuts/pieces.

Cashews are widely distributed through supermarkets (targeting upper-class nationals and expatriates) and, to a lesser extent, roadside stands (simpler packaging, often unbranded, lower quality and prices) and service stations (often lower prices than supermarkets). Hotels and restaurants, in tourist and non-tourist areas, are an underdeveloped market channel in most countries. In Guinea-Bissau, Nigeria, and on occasion in Senegal, cashews are sold through hotel room mini-bars, but in other countries hotels use cashews only in small quantities in cooking and for occasional conferences. Many hotel managers indicated interest in well-packaged (preferably private labeled) cashews. Wholesale distribution is underdeveloped, except in Burkina Faso and Nigeria, as established roasters usually distribute their own product to each client. Most cashews on the African market originate from local processors, however in Ghana, Nigeria, and The Gambia, imported cashews from Europe and Asia are found.

Not all West African consumers are aware of the origin of their cashews, and they indicate that they would be more interested if the product was African-branded. Similarly, consumers reacted positively to health claims on cashew packages. In general, there is hardly any promotion for cashews in West African markets. Simple posters or promotion campaigns could raise awareness and increase consumption.

Obtaining attractive packaging is a challenge in most countries. The most common packages are simple plastic bags with stick-on labels, though more sophisticated color-printed plastic and aluminum sachets are made by some roasters in Benin, Côte d'Ivoire, Nigeria, and Senegal. For larger quantities, recycled liquor bottles are common, unlabeled or re-labeled. Ghana's plastic jars are the most widely appreciated packaging in the region, according to consumers.

Cashews are most commonly sold dry-roasted and salted, plain, or oil-roasted and salted, almost always as whole nuts. Lack of a market for broken nuts is an impediment for processors since sales of broken nuts/pieces (20-40% of a processors production) could improve their profitability (and, in turn, reduce prices for wholes). In some countries, small shops or traditional markets sell broken grades for lower prices, but they are poorly packaged and have inconsistent quality. Consumers indicate that they would buy broken cashews if they were cheaper than wholes and better packaged and sorted. Secondary use of broken cashews is underdeveloped across the subregion. Cashew butter is made in very small quantities in Benin, Burkina Faso, The Gambia, Ghana, and Senegal, but this product is new and not yet widely consumed. Cashew cookies, nougats, and sweets are produced in a few bakeries (e.g., in The Gambia and Guinea-Bissau), but the potential for these products looks strong and is not yet exploited. A majority of

bakeries and many local food processors indicated that they were interested in cashew-based products but they lack recipes and experience in introducing new products into the market.

### **Market opportunities**

This study shows that, with targeted efforts, cashew consumption can be increased in West Africa. Numerous managers of distribution channels indicated interest to sell more cashews, provided they have consistent quality and attractive packaging. Consumers indicated that they like the product and are interested in buying it, especially if health benefits and African origin are communicated. Communicating with potential distributors in supermarkets, restaurants, and hotels, etc., and identifying their exact needs can help processors optimize sales and target consumers who are ready to buy.

The following summary of recommendations is based on interviews with consumers and retail point managers in the countries studied.

- **Use the full range of cashew grades**
  - Increase demand for cashew nuts by marketing and selling more broken kernels—sorted and packaged—in higher value channels.
  - Develop new recipes with broken kernels like brittle, cookies, biscuits, cakes, and nougats.
  - Market broken kernels to bakeries and restaurants.
- **Improve packaging**
  - Use semi- or fully transparent packs in clean material and pleasant shapes. Consumers want to see the product.
  - Make sure the packs are durable and protect the nuts.
  - Design attractive and colorful labels.
  - Small packs must be handy and easy to carry.
  - Large packs must be presentable and resealable.
- **Promote cashews**
  - Advertise the African origin and health claims of cashews. Provide nutritional information on the package.
  - Design in-store posters and promotional offers. Buy newspaper and radio advertisements.
  - Develop seasonable promotions for Christmas, end of Ramadan, and general celebrations like weddings and holidays.
- **Try new flavors**
  - Roasted and salted cashews are most popular, but new flavors such as peppered cashews may have potential.
  - Mix cashews with groundnuts, raisins, or dried fruits.
- **Develop distribution channels**
  - Improve service at existing outlets so stores don't run out of stock.
  - Develop attractive packages for tourist hotels and room mini-bars.
  - Explore customer branding.
- **Consider regional trade**
  - Supply supermarkets and hotels in other countries. Côte d'Ivoire, The Gambia, Ghana, and Nigeria can absorb more (locally or regionally produced) cashews.
  - Supply tourist sites in Mali, where cashews are currently unavailable.
  - Explore packaging equipment and material available in countries like Ghana, Nigeria, and Senegal.
- **Consider using a wholesaler**
  - A wholesaler could specialize in distribution and handle deliveries and store checks for a range of processor(s) and/or roaster(s)/salter(s).

# 1. BACKGROUND

West Africa's cashew processing sector is quite small given the region's status as the world's second largest producer of raw cashew nuts. West Africa produces an estimated 475,000 MT of the world's production of about 1.6 million MT. Though reliable statistics are not readily available, it is estimated that West Africa processes less than 10% of its production, about 42,000 MT of raw cashew nuts, turning it into approximately 8,400 MT of cashew kernels.<sup>3</sup>

## Cashew Processing Value Chain

Raw cashew nuts arrive in processing factories from January (starting in Nigeria) to July/August (in Guinea-Bissau). In each country, thousands of farmers, each with an average of 1–3 hectares (ha) of cashew trees, collect a few hundred kilos of raw nuts that have fallen off the trees. These nuts are then bought by small-scale raw nut traders or agents who sell consolidated lots to bigger traders. The average price for 1 MT of raw nuts varies largely during the season and from year to year, depending on world market dynamics (including factors such as international demand and the exchange rate between the U.S. dollar (\$) and the currency in which the raw nut is traded), and quality of the nut (including size, kernel output, humidity, and packaging). Prices during the 2007 season ranged from \$250–500 per MT at the farm gate. Cashew processing factories are often based within cashew producing zones to reduce transport costs, as the cashew kernel weighs only 20–25% of the raw nut. Thus, 4 to 5 MT of raw nuts are needed to produce 1 MT of cashew kernels. Since processors can source the raw material only during the season (which lasts about 3 months in any particular country), the processor must buy approximately 75% of the anticipated yearly production in advance, resulting in a large need for working capital.



**Processed cashews**

Cashew processing facilities vary largely in size. Basically, they can be divided into three categories: cottage processors, semi-industrial processors, and industrial processors.

**Cottage processors** are usually collectives or local associations that cut cashews by grilling them over an open fire and hitting the shell with a rock or small hammer. They sell plain bulk cashews by the measure (the size of the measure varies from market to market) or in recycled bottles (whiskey bottles are popular), targeting wholesalers and consumers through traditional markets. Despite their simple technology, these artisan processors dominate the processing sector in many countries in this study, largely due to their lower costs and flexibility: Cashew processing is only one of a diversified array of activities for most cottage processors.

**Semi-industrial processors** are the second most common actor in cashew processing. Semi-industrial processors have factories producing less than 250 MT of raw nuts per year. These processors use more advanced technologies to heat and cut the raw nuts. Some sell plain cashews in bulk, but most are also roasters, flavoring and packing their cashew kernels and selling them under their own brands. Nearly all semi-industrial processors market their products directly, usually to local markets that target high-end consumers allowing them to recover their elevated processing costs. Semi-industrial processors tend to be the most dynamic actors in the local cashew market, often experimenting with new packaging and developing new markets. Some successful processors buy kernels from other actors in the sector to roast and package them in their facilities, increasing their production and transitioning from processors to

<sup>3</sup> Presentation by Kraft at the Peanut and Tree Nut Processors' Association Convention, January 2007

roaster/marketers. Semi-industrial factories exist in Benin, Côte d'Ivoire, Ghana, Guinea-Bissau, Nigeria, Senegal, and Togo.

Five countries in West Africa now boast **industrial capacity cashew processors** that target the export market. These factories—most of them established in recent years—use modern, Indian semi-mechanical technology to produce 1,000–15,000 MT of raw nuts per year. Though export-oriented, they sometimes sell kernels to local roasters and semi-industrial plants—particularly the broken grades, which can be difficult to commercialize on the export market. Industrial processors are found in Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, and Nigeria.



**Semi- industrial cashew processing at ACASEN in Senegal**

### Marketing and Consumption

Processors sell to retailers and wholesalers who distribute the processed product, mainly whole cashews. The main retailers in the West African regional cashew sector are independent supermarkets, gas stations, small shops, gift shops, roadside stands, and hotels. The few wholesalers in this sector are principally supermarket groups, buying for multiple outlets (usually less than five), and informal traders exporting small quantities of cashews to neighboring countries.

Many West African processors remain largely reliant on local consumers to buy their cashew kernels. One reason is that many processors have limited production, which prevents them from regularly filling a container of 15 MT of bulk cashew kernels for the world market. Another reason is that larger processors cannot export all 26 grades of cashews they produce, so they look for a local market for ‘off’ grades to sustain operations year-round.

Raw cashew nuts that are not processed in Africa are currently exported to India and Vietnam. In these latter two countries, the nuts are processed and then sold via international traders to European and North American roaster/salters who then distribute them to consumer markets. Europe and the U.S. represent 29% and 50%, respectively, of the global cashew consumer market.<sup>4</sup> Selling cashew kernels directly from West Africa into these consumer markets reduces both time and cost of transport. But West African processors face several challenges. Many of them are “first-movers,” attempting to build an industry in a difficult environment in terms of availability of equipment suppliers, competitive sources of finance, a trained workforce, and a smooth logistical system in terms of roads and ports. Contrary to local markets in India and Vietnam, cashews are not a regular part of the diet in any part of Africa. While Indian and Vietnamese competitors can sell part of their production on the local markets, African processors are forced in extreme cases to discard some of their lower range products or use them for animal feed. Additionally, the market for by-products of the cashew nut (the husk and the skin of the cashew kernel) is nonexistent in Africa, while in Vietnam and India they are used to extract cashew nut shell liquid (CNSL)—used in painting and brake-oil industries—or other products.

International buyers in the U.S., Europe, and the Middle East purchase vacuum-packaged cashew kernels. (Two vacuum-packed 25-pound plastic bags fill one carton; 700 cartons, or 15 MT, fill a 20-foot container.) While there are 26 grades of cashew kernels sold on the international market, buyers mostly accept containers with 1 to 6 different grades. The 26 grades are based on:

- size of the kernel (number of kernels per pound): a low number, such as 180, indicates large kernels, and a high number, such as 450, indicates small kernels

<sup>4</sup> Presentation on cashews by Kraft at Peanut and Tree Nut Processors’ Association Convention, January 2007

- color (white or scorched)
- whether they are whole, or broken into splits, butts, large or small pieces

Large whole white (WW) kernels attract the highest prices. The WW320 is the reference grade (and one of three most preferred by roaster/salters) in the international market. Prices are stated in U.S. dollars (\$) per pound.

West Africa's position as a raw nut exporter may change in the near future, as processing capacity is growing rapidly. International nut trading companies Olam and Global Trading built three new export-oriented processing factories in Benin, Côte d'Ivoire, and Nigeria in the past 2 years, and further expansions are under consideration. At the same time, at least three local businesses have set up facilities in Burkina Faso and Nigeria targeting the export market. Developing the local market for cashew sales will also help processors trying to export by providing a consumer source for less common grades of cashews and a regular source of income.



***The cashew processing industry is creating jobs in West Africa, as in this factory in Côte d'Ivoire. This retail market study aims to help the processing industry, from cottage to industrial-level processors, grow by expanding consumption in the region.***

## 2. STUDY OBJECTIVE AND METHODS

This report aims to be a tool for cashew processors to increase their sales in the regional West African market. If international companies can sell their products on every street corner and realize substantial gains, African cashew processors should be able to do the same. Cashews are a healthy<sup>5</sup> and appreciated snack in the subregion and can compete with other snacks such as potato chips or plantain chips.

Most processors operating in West Africa target the local markets. The international market is more demanding in terms of quality and shipment uniformity, and is subject to relatively larger price fluctuations.<sup>6</sup> Even as West African exports grow, the local market will remain an important outlet for export-oriented operations—especially for off-grade (broken) kernels—and a secure source of income.

To date, cashew consumption in local markets in West Africa has been marginal, especially compared to other cashew producing countries like India and Brazil, where local markets played a critical role in the development of world-class, export-oriented sectors, even though India itself introduced cashews only 100 years ago (they are originally from Brazil). The 231.3 million West African consumers<sup>7</sup> can also become an important market for off-grades and secondary products, such as cashew cookies, other sweets, and cashew-based sauces.

WATH/A and the African Cashew Alliance (ACA) conducted this market study in 10 West African countries to assist processors in broadening cashew distribution, raising cashew awareness, and exploring regional opportunities. This study provides a snapshot of the current state of cashew processing, marketing, and consumption, highlighting best practices and opportunities for local processors in product development and market channels to increase sales.

We researched three levels of the cashew value chain, asking the following questions:

1. **Processors:** What is the processing capacity of each country? What kinds of cashews do local processors and roasters produce (which grades, which recipes)? Is the local production of processed cashews expected to increase or decrease?  
 Researchers interviewed local processors by phone and e-mail.
2. **Distribution channels:** Who buys, sells, or uses processed cashew nuts in West Africa? What kinds of products and packaging do they prefer? What are the various retail prices and margins of those distributors? What can be done to increase sales of processed cashew nuts?  
 In each country, field researchers used standardized questionnaires to interview 16–50 managers, shopkeepers, and food processors at supermarkets, hotels, gas stations, bakeries, and restaurants.
3. **Consumers:** Who consumes cashew nuts? What kinds of products are preferred by consumers? Where do people buy and eat cashew nuts? What can be done to increase their consumption?  
 In each country, field researchers interviewed people in supermarkets or hotel lobbies with standardized questionnaires and then gathered another 8–10 people to comment on various types of packaging and taste several types of cashew nuts to identify their preferences and perceptions in a consumer panel.  
 Note: The consumer study aims to give an indication of preferences, but does not necessarily give a representative view of common trends in the country due to the small number of people interviewed. Consumer preferences stated in this study should be interpreted in this context.

**Request questionnaires used in this study at [info@watradehub.com](mailto:info@watradehub.com).**

<sup>5</sup> See the article at Newstarget “Cashews boost blood-pressure-regulating reflex.” (<http://www.newstarget.com/020005.html>)

<sup>6</sup> Cashew kernel prices can vary considerably from one year to another. The price of WW320s on April 1, 2005 was \$2.55, compared with \$1.98 on April 1, 2006. (Source: *Cashew Week*, March 24, 2007)

<sup>7</sup> Total population in the 10 researched countries according to the CIA World Fact Book. (<https://www.cia.gov/library/publications/the-world-factbook/>)

The following table summarizes the number of managers and consumers interviewed per country.

**Table 2. Retail market interviews held per country.**

	Benin	Burkina	Côte d'Ivoire	Gambia	Ghana	Guinea-Bissau	Mali	Nigeria	Senegal	Togo	Total
<b>Managers Interviewed</b>											
Supermarkets	14	9	7	4	8	3	9	10	8	6	<b>82</b>
Roadside shops	3	15	5	2	17	1	11	3	10	3	<b>71</b>
Airport shops	1				1	1	1	1	2		<b>7</b>
Airlines		3						2			<b>5</b>
Hotels	7	9	9	4	8	2	12	6	8	3	<b>68</b>
Restaurants	2	7	5	2	6	2	7	4	4		<b>39</b>
Service stations	1	5	3	2	10	1	4	2	4		<b>32</b>
Food processors & bakeries	5	8	11	3	2	2	7	4	5		<b>47</b>
Wholesalers				2							<b>2</b>
Pharmacies					1						<b>1</b>
<b>Consumers Interviewed</b>											
Surveyed*	22	30	26	44	44	25	28	50	25	20	<b>314</b>
Consumer panel	13	8	9		13	9	10	10	8		<b>80</b>

\* in supermarkets & hotels

WATH/A and ACA coordinated the study in Accra. Partner organizations carried out field research, focusing on main consumption centers (main urban areas and expatriates/tourist destinations). Table 2 lists the 10 countries, cities where interviews took place, the partner organization facilitating the research, and dates.

**Table 3. Countries studied and field research information.**

Country	Places Visited	Study Facilitator	Dates of 2007 field research
<b>Benin</b>	Cotonou, Natitingou, Bohicon	Peace Corps Benin	March 8-20
<b>Burkina Faso</b>	Ouagadougou, Bobo Dioulasso	PAMER Project	March 25-April 12
<b>Côte d'Ivoire</b>	Abidjan	Olam with financing from GTZ and ACA	March 13-25
<b>The Gambia</b>	Banjul, Serrekunda	Comafrique	April 5-15
<b>Ghana</b>	Accra, Kumasi, Cape Coast	TIPCEE	March 1-25
<b>Guinea-Bissau</b>	Bissau	SNV	March 14-25
<b>Mali</b>	Bamako, Segou, Mopti	Projet Cadre Intégré	March 5-30
<b>Nigeria</b>	Port Harcourt, Lagos	PHCCIMA and NACC	Port Harcourt: Mar 12-30 Lagos: April 4-15
<b>Senegal</b>	Dakar, Saint Louis, Ziguinchor	WATH/Dakar	March 3-25
<b>Togo</b>	Lomé	Peace Corps Benin	March 21-25

## 3. CURRENT STATUS

### 3.1 Overview of the Processing Sector

- The principal actors supplying consumers in the West African local cashew market are processors, roasters, and distributors. Processors range from cottage to semi-industrial to industrial-scale, export-oriented operations. Some processors are also considered roasters, meaning that they flavor and package the cashews. There are also roasters who source semi-finished white kernels from other separate companies. Distributors are retailers, and occasionally wholesalers, who market the product to consumers or other retailers.
- Large-scale cashew processing is taking place in Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, and Nigeria. Semi-industrial processors are the primary suppliers to the local markets and are present in most West African countries. Cottage processors are also a major source of kernels for domestic markets and are present in all 10 countries. However, the large number of actors and the informal nature of cottage processing made it impossible to get solid information on total processing capacity.
- **West Africa's total formal processing capacity is more than 42,000 MT** of raw cashew nuts, or about 10% of total production of raw nuts. (Production was estimated to be 445,000 MT in 2006).<sup>8</sup> Actual utilization of this processing capacity is estimated to be 30–50%.
- The West African cashew processing sector is growing rapidly—new export-oriented plants have opened in the past 2 years in Benin, Burkina Faso, Côte d'Ivoire, and Nigeria. These plants will also increase the supply of cheap broken grades available in West Africa.
- Summary figures on the West African cashew roasting sector were not available.

**Table 4. Summary table of identified West African cashew processors.\***

	# Semi-industrial processors	# Large-scale processors**	Installed capacity***	# Direct employees incl. seasonal	Reported production 2006***	% exported
<b>Benin</b>	5	1	1,730	273	30–50	87%
<b>Burkina Faso</b>	1	1	2,000	209	500	96%
<b>Côte d'Ivoire</b>	3	2	10,100	1000+	NA	98%
<b>The Gambia</b>	0	0	0	0	0	0
<b>Ghana</b>	10	0	530+	NA	350	0%
<b>Guinea-Bissau</b>	26	3	4,080	NA	NA	85%
<b>Mali</b>	0	0	0	0	0	0
<b>Nigeria</b>	7	5	23,600+	6,376+	14,750+	86%
<b>Senegal</b>	15	0	350	500	NA	0%
<b>Togo</b>	1	0	80	<50	80	90%
<b>Total</b>	<b>68</b>	<b>12</b>	<b>42,470+</b>	<b>8,408</b>	<b>15,730</b>	

\* Findings are based on April 2007 processor interviews, except in Ghana (interview with the Cocoa Research Institute) and Guinea-Bissau (data based on a 2006 study by the Ministry of the Economy). Detailed information on individual factories is available in the country summaries of this study.

\*\*Large processors have a capacity of 1,000+ MT of raw nuts/year.

\*\*\*Capacity and production figures are in MT of raw nuts per year. Installed capacity figures for Benin and Nigeria are significantly higher than 2006 production, due to new major investments in processing.

<sup>8</sup> African Cashew Alliance, *Cashews Globally and in Africa*, 2007

### 3.2 Major Trends in Consumption

#### Cashews are an established snack food in the West African diet.

- Cashews are widely known and appreciated in West African urban centers, from Dakar to Bamako to Lagos. Regionally, 65% of urban consumers interviewed had tasted cashews, whereas more than 90% of interviewees in Benin, The Gambia, Guinea-Bissau, and Senegal had eaten cashews. As noted in the table below, **18% percent of all urban consumers interviewed declared that they consumed cashews more than once a week.**
- Cashew consumption was most widespread in The Gambia, where 40% of interviewed urban consumers ate cashews at least once a week, followed by Benin, Guinea-Bissau, Nigeria, and Ghana (29–26%).
- Consumers interviewed said that they think of cashew nuts as **tasty and expensive** products.

**Table 5. Consumption of cashews by country.**

	Population in millions*	Gross domestic product per capita*	Average supermarket retail price for cashews per kg	People who had eaten cashews (%)	Cashew consumers that eat cashews at least once a week (%)	Sample size of consumer survey
<b>Benin</b>	8.0	\$1,100	\$13.35	95%	29%	22
<b>Burkina</b>	14.3	\$1,300	\$9.80	80%	24%	30
<b>Côte d'Ivoire</b>	18.0	\$1,600	\$20.80	81%	14%	26
<b>Gambia</b>	1.6	\$2,000	\$26.40	93%	40%	44
<b>Ghana</b>	22.9	\$2,600	\$20.28	89%	26%	44
<b>Guinea-Bissau</b>	1.4	\$900	\$12.16	96%	29%	25
<b>Mali</b>	11.9	\$1,200	\$9.96	57%	NA	28
<b>Nigeria</b>	135.0	\$1,400	\$16.32	82%	28%	50
<b>Senegal</b>	12.5	\$1,800	\$18.64	92%	17%	25
<b>Togo</b>	5.7	\$1,700	\$18.92	88%	0%	20
<b>TOTAL</b>	<b>231.3</b>	<b>Avg. \$1,560</b>	<b>Avg. \$16.67</b>	<b>Avg. 85%</b>	<b>Avg. 23%</b>	<b>314</b>

\* Source: CIA, The World Fact Book, June 2007 (<https://www.cia.gov/library/publications/the-world-factbook/>)

#### Demand for cashews is limited by income and presence of cheaper substitutes.

- Both retailers and consumers named the high price of cashews compared to other snacks relative to per capita income as the main limitation to increased consumption of cashews in every country, except Nigeria where price was a close second behind quality. As noted in Table 4, cashew products are expensive—in urban supermarkets in Côte d'Ivoire, The Gambia, Ghana, and Senegal, supermarket retail prices per kilo are close to those found in American or European supermarkets despite more than 30 times lower average incomes in West Africa.
- The main alternatives to cashew nuts are peanuts, potato chips, and other locally produced snack foods such as plantain chips. Cashews are more expensive than these competing snack products, except in Burkina Faso, Guinea-Bissau, and Mali, where imported potato chips are more expensive. The most common substitute, roasted peanuts, is on average three times less expensive than roasted cashews in supermarket retail packages (on a per kilo basis).

#### Cashews are widely distributed in West Africa.

- The principal distributors for locally produced cashews are supermarkets, roadside stands, gas stations, and hotels. Supermarkets are especially important: **100% of large urban supermarkets interviewed sold cashews**, except in Burkina Faso, Ghana, and Togo, where percentages were only slightly lower.
- With the important exception of Ghana, cashews are widely available in supermarkets and other retail outlets in main cities across West Africa.

- But, it should be noted that the majority of these populations shop at weekly open markets, not in supermarkets or formal retail outlets.

**Table 6. Percent of interviewed urban supermarkets and retailers selling cashews.**

	Benin	Burkina Faso	Côte d'Ivoire	Gambia	Ghana	Guinea-Bissau	Mali	Nigeria	Senegal	Togo
<b>Supermarkets</b>	100%	78%	100%	100%	38%	100%	100%	100%	100%	83%
Sample size	14	9	11	4	8	3	9	10	8	6
<b>All retailers*</b>	89%	76%	100%	70%	43%	100%	64%	94%	88%	78%
Sample size	18	29	21	10	37	6	25	16	24	9

\*All retailers include supermarkets, roadside shops, service stations, airport shops, and pharmacies.

#### Summary findings of cashew market outlets studied.

- Supermarkets sell well-packaged, good quality products by established roasters, large margins, sold to upper class and expatriate consumers.
- Roadside stands and small shops offer simply packaged and often unbranded products at low prices. Quality is often lower, and the seller is sometimes also the roaster.
- Service stations often sell a narrow range of products by established roasters. Prices are often lower than supermarkets for similar products.
- Hotels and restaurants are an underdeveloped channel in most countries. In Nigeria and Guinea-Bissau, cashews are sold through mini-bars in individual rooms. However, in hotels in other countries, cashews are used only in small amounts for occasional conferences and in cooking.
- Wholesale distribution is underdeveloped, except in Burkina Faso and Nigeria, and established cashew roasters usually distribute their own product to each client-supermarket or stand. This is relatively inefficient and adds costs to the average cashew price.

#### Retail prices vary regionally by as much as 100%.

- **Prices for retail cashew products vary widely between countries in West Africa.** The gap is particularly large between raw nut-exporting coastal countries and inland countries where raw cashew nuts have few buyers and thus are cheaper for processors. For example, retail supermarket prices in Côte d'Ivoire and Ghana are twice the price per kilo of cashew nuts in supermarkets in Burkina Faso and Mali.
- Price differences of kernels are due not only to the different prices of raw nuts, but also to the availability of processing facilities in the country, and differences in efficiency, cost of labor, and price of packaging at those facilities. As shown in the chart below, Benin's supermarket retail prices are 30% less than Ghana's, despite higher average raw cashew nut prices.

**Table 7. Average cashew prices.**

	Benin	Burkina Faso	Côte d'Ivoire	The Gambia	Ghana	Guinea-Bissau	Mali	Nigeria	Senegal	Togo
<b>Price/kg*</b>	\$13.90	\$9.90	\$20.90	\$20.37	\$20.30	\$10.80	\$8.10	\$16.30	\$18.60	\$18.90
<b>Roasters' sales price/kg**</b>	\$11.30	\$8.30	\$17.40	\$16.02	\$15.80	\$8.00	\$5.90	\$11.90	\$14.60	\$15.20

\*Average per kilo price of all cashew products sold in supermarkets, roadside shops and gas stations.

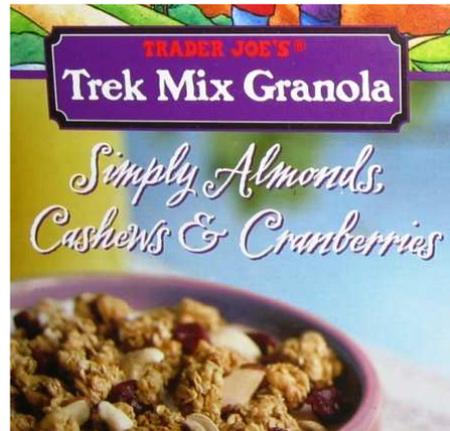
\*\*Estimate of the average roaster's wholesale price, calculated by subtracting the supermarket's average margins from the average retail price. This is a proxy estimate of the price competitiveness of cashew roasters, since roasters did not quote their prices.

### Roasted whole kernels dominate the West African market.

- **The most commonly available flavors of cashew nuts are dry-roasted and salted** (most common in Burkina Faso, Côte d'Ivoire, Ghana, Mali, Nigeria, and Senegal), **plain** (most common in The Gambia, Guinea-Bissau, and Togo), and **oil-roasted and salted** (most common in Benin and Togo, in a tie with plain nuts).
- Most cashews sold across West Africa are packaged in **simple plastic bags or sachets** of 100–200 g with stick-on labels, though more sophisticated color-printed plastic and aluminum sachets are made by some roasters in Benin, Côte d'Ivoire, Nigeria, and Senegal. Larger retail packages (400 g on average)—often **relabelled liquor bottles**—are popular in Benin, Mali, Nigeria, and Togo. Ghana has perhaps the most developed packaging: high-quality durable **plastic jars** manufactured in Ghana (200–250 g). They were admired in group interviews across West Africa.

### Urban markets are suspicious of broken grades.

- Supermarkets don't sell broken grades in Burkina Faso, Côte d'Ivoire, The Gambia, Mali, or Senegal. In other countries, less than 40% of interviewed supermarkets sold broken grades, and generally in small quantities. Small shops and gas stations also sold broken cashews significantly less often than whole kernels. In total, only 25% of retailers who sell whole cashews also sell broken cashews.
- Retailers viewed broken cashews as a poor quality product—not equal to the audience of their store according to supermarket managers—and said broken kernels sold poorly.
- The luxury profile of cashews limits interest in “cheap” products: as one Nigerian processor said, cashews are consumed in largest quantities by upper-class consumers, who do not want to buy “inferior” products.
- One reason for the lack of interest in broken grades may be that **broken kernels are not sorted in many countries**. That is to say, all broken grades—big and little pieces, whites and scorched—are sold together, creating a product of clearly uneven quality.
- **Secondary uses for broken pieces are underdeveloped across the subregion**. Cashew butter is made in very small quantities in Benin, Burkina Faso, The Gambia, Ghana, and Senegal, but this product is new and does not seem to be widely consumed outside of western Burkina Faso, where it is available cheaply and used as a base for sauces. Cashew cookies, nougat, and sweets are also only produced in a few bakeries in The Gambia and Guinea-Bissau.
- The potential for cashew cookies looks strong, as many interviewed consumers enjoyed the taste of this product, but the product has not yet been developed anywhere on a large scale.



**There are multiple uses for broken grades, including as an ingredient in cereals or snack mixes.**

## 3.3 Market Opportunities

Volumes sold in local markets are now so low that processing facilities are not optimizing their capacities, making cashew retail prices expensive. If prices decrease while marketing of cashews improves, demand for cashews will increase and so will sales volumes, making overall operations more cost effective and profitable.

- Reducing the retail price per kilo of cashew products is essential to increasing overall demand.
- It is also possible to sell more broken kernels in higher value channels. Sorting and packing them carefully will enable processors to sell broken kernels at a higher price than the current one,

though this price should still be less than the price for whole kernels. For example, many Nigerian and some Senegalese processors routinely sell their broken kernels by mixing broken grades with whole grades in their higher value products. In other countries, broken grades are kept separate and are sold cheaply in lower-value channels, such as occasional markets in producing areas, or are not sold at all—several medium-sized processors stated that some broken grades were occasionally used as animal feed, for lack of a market. **Increasing use of broken grades is essential to rapid growth in cashew consumption in West Africa.**

- Consumers were interested in the possibility of buying low-priced, well-sorted broken grades. In group interviews conducted in eight countries, after being presented with a sample sachet of sorted large white pieces, 63% of the participants said they would buy broken cashews if they were cheaper than whole nuts. **Sorting broken grades could increase consumer interest and prices in the best grades**, particularly butts, large white pieces, and splits.
- **The large retail price differences between West African countries create strong opportunities for regional trade**, particularly for retail products or raw kernels from Burkina Faso, Guinea-Bissau, and Mali to Côte d'Ivoire, The Gambia, Ghana, and Senegal. Regional trade can also increase demand by lowering average retail prices in importing countries.

#### Explore promising national markets.

- The most promising local cashew markets appear to be Côte d'Ivoire, The Gambia, Ghana, and Nigeria.
- **Nigeria is the largest potential market** possessing the region's biggest economy with over half of its overall population (140 million people) and comparatively large upper and middle classes. Cashews are already popular: 82% of urban consumers in Lagos and Port Harcourt have eaten them, and 28% of cashew consumers consume them more than once a week. The Nigerian market is likely to be largely captured by domestic processors due to the comparatively low retail prices and estimated roaster prices observed in this study. Imports of white kernels will occasionally be profitable however, particularly from interior countries, as long as the supply of locally processed kernels continues to face occasional shortages due to limited access to capital in the processing sector.
- **Due to their high cashew retail prices, Côte d'Ivoire, The Gambia, and Ghana are also good candidates for regional trade of white kernels—and potentially, retail goods—from Burkina Faso, Guinea-Bissau, Mali, and perhaps Benin.** These markets are likely to offer greater return than domestic markets for processors who are able to export—the study estimated roaster wholesale prices to be \$9 per kilo higher in Côte d'Ivoire than in Burkina Faso, for example—and cheap imports will promote rapid growth in demand as well.
- **Ghana offers particularly large opportunities for growth**, as domestic producers have achieved only a low penetration in urban markets: only 38% of supermarkets and 43% of all visited retailers sell cashew products. Cashew production in Ghana is also quite modest relative to its population.



**Varied recipes for cashews are offered in the U.S. market. Such opportunity also exists in West Africa.**

### 3.4 Product Development Opportunities

#### Offer different and diverse flavors.

- **Roasted and salted cashews are the most popular flavor in West Africa.**
- New flavors, such as cashew nuts with black pepper, have good potential in certain markets.
- Spiced cashew nuts do not appeal to consumers outside of Guinea-Bissau, Nigeria, and Senegal.

- Please see individual country summaries (Part 2 of this report) for more information about flavor preferences in each country.

### Improve packaging.

- In all countries studied, many of participants in the group interviews said they liked **fully or partly transparent packs** so they could see the nuts.
- Consumers prefer packs with **attractive** and colorful labels, clean-looking materials, and pleasing shapes.
- **Durable packs that protect nuts well** increase consumers' perception of quality.
- **Small size packs (up to 125 g) must be handy and easy to carry** for individual use: plastic or aluminum sachets are most popular.
- **Large size packs must be presentable** (to be put on a table for family or friends or used for receptions) **and reusable** (i.e., screw lid).
- **Develop more cashew-based products.**
- **Among the 32% of interviewees who had eaten cashew cookies, 92% liked them. Of a much smaller sample who had tasted caramelized cashews, 85% also liked them.**
- In specific regions, people eat a lot of cashew-based products (i.e., cashew butter in western Burkina Faso, cashew-based meals in Guinea-Bissau).
- **Raising awareness about secondary cashew products** by launching new products, promoting cashew biscuits and cakes to food processors and bakeries, and promoting cashew-based meals to restaurants will increase local processors' sales and to create outlets for broken kernels.
- Products with potential include cashew cookies and cakes, caramelized cashews, cashew brittle, cashew butter, and cashew bread.



*Improved packaging, as shown with this Nigerian product, appeals to consumers.*

### Improve marketing and communication.

- **Increasing consumer interest was noted as the second most important means—after price reductions—to promote cashew consumption,.**
- **Raise awareness of the health benefits of cashews.** Many retailers saw health promotions as an important way to increase consumer interest in cashews. Health promotions also have the benefit of changing the image of cashews from a luxury good for special occasions to a health food. The health benefits of cashew nuts can be explained on labels, on banners, through handouts, and through stories and advertisements in the media.
- Many distributors also said in interviews that **more in-store marketing campaigns** would increase sales, as would specific product formats for special events (National Days, Christmas). Price discounts (simple price reductions, or through “buy 2 get 1 free” type promotions) would also stimulate sales and cashew consumption, but may be unfeasible for small and mid-sized processors and roasters.
- **Developing new cashew products requires promotions to raise awareness about them.** Promotions should target food processors and bakeries (tasting sessions, brochures describing new recipes for cashew products) and consumers (tasting sessions in major outlets).
- **Developing new products will require considerable patience.** In general, consumers appeared to be conservative about buying new cashew products: they preferred to stay with familiar products. This is reflected in the narrow range of cashew flavors available in each market: two flavors had more than 75% of market share in all 10 countries. The high price of cashew products makes trying an unknown product an expensive risk for the West African consumer.

## 4. MARKETING CASHEWS TO FOOD PROCESSORS

### 4.1 Role of the Food Processor in the Cashew Market

Though most cashew kernels are eaten as a snack, alone or in mixes with other nuts, cashews can also be used as an ingredient in food processing. In both processing and destination countries, **cashews can be used in the preparation of cookies, cakes, confectionary items such as candies and chocolate bars, ice creams, spreads, and prepared foods such as sauces.** This is an important market for cashew processors internationally, particularly for smaller broken grades, which consumers in many countries are less willing to purchase directly. In addition to providing a market for off-grades, cashew-based food products increase the overall consumption of cashew nuts in a given market.

- Food processing firms and bakeries are potential outlets for cashews, especially for broken kernels.

### 4.2 Use of Cashews in Food Processing in West Africa

The food processing industry in West Africa is underdeveloped, particularly in the segments of greatest interest for cashew processors: biscuits and industrial baking, confectionary manufacturing, and manufacturing of prepared foods. Baked and confectionary goods, except plain white bread and certain sweets, are not widely consumed in West Africa due to low incomes and lack of consumer familiarity. The existing market is mostly captured by imported goods. Large international and domestic food processing companies focus mostly on processed goods, especially food oils, powdered drinks, milk products, and cereals. **The sector of interest to cashew processors is limited to a few industrial biscuit and sweet manufacturers and a large number of relatively small bakeries.**

However, in the 10 countries studied, cashews are currently being used in the food processing industry in small quantities. **Use appears to be particularly advanced in The Gambia and Guinea-Bissau.** Across all countries studied, 19% of bakery managers interviewed and 33% of local food processors are using cashew nuts in their products. This sample over-represents cashew use in food processing: Only large bakeries in major cities were interviewed, and only a few food processors could be visited. However, the study was able to document the existence of a small food processor market for cashew nuts and identify some ways in which this sector can be developed in the future.

**Table 8. Use of cashews in food processing.**

	Bakeries	Local Food Processors	International Food Processors
<b>Number interviewed</b>	36	9	2
<b>Percent using cashew nuts</b>	19%	33%	0%
<b>Percent of above using broken grades</b>	46%	75%	0%
<b>Percent interested in developing new cashew products</b>	71%	44%	0%
<b>Main products using cashews</b>	Candies, cookies, cream cakes, ice creams, garnish	Cashew cookies, cakes, caramelized cashews, cashew butter, cashew fiber from cashew apples	None

As noted in Table 8, **big international food processors (Nestle and Cadbury, in this case) do not use cashews in their products. They also stated that they were not interested in using them in the near future.**

Food processors using cashews tend to be NGOs (Benin, Guinea-Bissau) working to diversify food products and food processing. They produce mostly cashew cookies and cakes for retail sale in supermarkets or in their own shops. Cookies are their best-selling processed cashew product.

Food processors also produce a wide range of products from cashew apples—including jams, juices, syrups, wine, alcohol, and vegetable fiber use in artificial meat products. These products fall outside the scope of the current study, however.

Bakeries using cashews were largely urban, and they used cashews in cookies, candies, cream cakes, and ice creams. **The Gambia and Guinea-Bissau have the largest number of bakers using cashews (100% of interviewed bakeries in The Gambia, 50% in Guinea-Bissau), as well as the widest variety of products.**

Reliable information on the quantity of cashews used by these establishments was not available, but volumes appear to be small. One food processing company, *Centre Songhai* in Benin, uses 400 kg of broken cashew kernels per year. Most bakeries use an average of 2–3 kg per month, or about 30 kg/year.

### 4.3 Barriers to the Growth of Cashew Use in the Food Sector

Although food processors were interested in developing cashew-based products, they cited a number of obstacles, in particular the lack of established markets, few suppliers, and the high price of cashews.

**Table 9. Identified barriers to developing cashew products.**

	Bakeries	Local Food Processors
Lack of information on nutritional characteristics	57%	22%
Lack of suppliers of cashews and broken cashews	37%	0%
High price of cashew nuts	52%	33%
No market for cashew-based products	45%	11%
Lack of appropriate packaging materials	43%	11%

**Representatives from bakeries and local food processing companies expressed concern over the lack of recipes and training about how to make cashew products,** as most bakeries and food processors are accustomed to learning by example. They do not develop their own innovative products.

Many food processors also noted a **lack of nutritional information on cashews.** This high response rate is probably linked to an interest in marketing cashew products as health products. Indeed, 54% of all food processors and 100% of international food processors noted media campaigns on the health benefits of cashews as an important way to promote cashew sales.

**Lack of suppliers was also an important problem.** Cashew processors are present in all countries in the survey but many are unknown to food processors and bakeries. Also, processors do not market the cashew products most interesting to food processors: cashew butter (as an input for cashew products) and the smaller broken grades. **This lack of supply is evident in the fact that 54% of bakeries and 25% of food processors using cashews as an ingredient use expensive whole cashew nuts, not broken grades. They claim they simply cannot get even-quality broken nuts in their area.**

Lastly, bakeries—particularly those that want to develop large-scale cookie production—were also concerned by a **lack of appropriate packaging materials.** A large bakery in Benin noted that in order to compete with imported biscuits from the Middle East, cookies would need attractive, durable

packaging and at least a 6-month shelf life. These requirements necessitate a high-quality opaque package and appropriate preservatives not readily available in Benin.

#### 4.4 Potential for Increased Cashew Use in Food Processing

Though current use of cashews is low in bakeries and food processing, there is **potential for medium-term growth**, in spite of the barriers listed above:

- 71% of bakeries and 44% of local food processors said that they were interested in developing cashew products.
- **Prospects look especially promising for cashew cookies**, currently the most widely available cashew product in West Africa. Cashew cookies are simple and cheap to manufacture and are liked by African consumers who have tried them. This is particularly evident in The Gambia, where 39% of consumers have eaten cashew cookies and 95% enjoyed them, and in Guinea-Bissau, where 67% of consumers have eaten cashew cookies and 100% liked them. Consumers also appreciated cashew cookies in other West African countries, though far fewer consumers had ever tasted them.



***Though whole roasted cashews dominate the regional market in West Africa, there is great potential for cashew use in other products such as the cookies, toffee, and rolls offered at this shop in Guinea-Bissau.***

**Demand for cashew cookies is significant.**

**Confectionary goods—such as candies containing cashews or cashew nougat—and cashew butter also have potential, as they are relatively cheap to produce.** However, these products are much less common and target high-end consumers; it is not clear how such consumers would react to them. Cashew butter, in particular, would need sustained marketing, as it requires consumers to spread it on bread or use it in sauces. Cashew-based candies and cashew butter could sell well if accompanied by strong marketing policies to raise awareness. For example, companies could sponsor product tasting in their bakeries or pastry shops and in restaurants.

High-income consumers may be attracted to more expensive cashew products such as cakes, ice creams, and pastries.

- Cashew processors will need to be proactive to take advantage of markets in cakes, ice creams, and pastries by helping develop recipes for cashew products and assuring food processors that they can supply the appropriate cashew products—particular fresh, high quality cashew butter and uniform small cashew pieces.

**Promoting new cashew products will require partnerships with targeted distributors, who could share recipes, assistance, and promotion materials.**

## 5. COUNTRY SUMMARIES

Field researchers carried out portions of the study in one, two, or three major cities in each country: please refer to Table 1 of this report for specific information. Additionally, a more extensive report on each country is available in Part 2 of Cashew Processing, Marketing, and Consumption in West Africa.

### 5.1 Benin: Expand into Tourist Market, Private Labeling

Benin, a country of slightly more than 8 million inhabitants and a GDP of \$1,100 per capita, grows 35,000–50,000 MT of raw nuts per year. Benin has one export-oriented processing company (capacity 1,500 MT/year, started in 2007), four small semi-industrial processing companies (capacity 20–80 MT/year), and many groups of cottage processors (< 20 MT/year). Its total processing capacity is < 1,730 MT; in 2006 approximately 30–50 MT were processed, resulting in 6,000 to 10,000 kg of cashew kernels.

Cotonou is recognized in Benin and neighboring countries as an important cottage processing and trading center. Figures on the exact size of this trade are not available. Raw cashew nuts are much more expensive in Benin than in neighboring Nigeria, due to the Beninese government's fixed floor price for raw nuts, though Nigerian quality is reputedly lower. Benin already exports retail packaged cashews to Nigeria and Togo, mostly via informal traders. Formal processors are beginning to export to Nigeria, a natural market for Benin, but most have little knowledge of the Nigerian market. A lack of English skills and security concerns keep many business people from visiting Nigeria personally. Processors have direct relations with Togolese distributors, but the volume is small.

Cashews are sold in clear plastic sachets or bottles with stick-on labels (400 g), unlabeled glass bottles (400 g) and aluminum bags (several sizes) for \$5.20–5.80 for roasted cashews, and \$5.60–6.40 for the buttered variety. This converts to an average of \$13.35/kilo in supermarkets, which is comparable to cashew prices in Washington, DC. Cashews are widely distributed in the capital city: All supermarkets and 75% of hotels contacted distribute cashews. However, hotels and restaurants in tourist destinations frequently do not sell cashews, nor is the distribution channel of gas service stations exploited. Hotel managers appreciate the association of cashews with luxury and high-end establishments; however they do not use cashew products yet for cooking, baking, or in mini-bars and mainly distribute cashews upon request at conferences or as gifts for high-valued customers. Hotels have no established relations with cashew distributors; they buy cashews in retail channels, at high prices.

Poor packaging and price are the main barriers to increased sales, according to supermarkets and distributors. Up to now, broken grades are not widely distributed in Cotonou because consumers consider cashews a luxury good and do not want the lower quality of broken cashews. However, capital city consumers indicate that they would be interested in broken cashews if they were well sorted and cheaper than the whole cashews. In occasional markets and through itinerant sellers, especially in lower-income cities, small packages (35 g) of the lowest-grade broken cashews already sell well at \$0.20.

#### Opportunities

- Beninese processors could increase their volumes (and use a greater percentage of their installed capacity) by exploring Nigerian and Togolese markets more aggressively to export their product. Exports of high-value well-packaged products to Mali are another good option that is currently underdeveloped.



**Beninese cashews in attractive containers attract consumers from all social classes.**

- Small, eye-catching products in packages that are durable (to reduce spoilage, breaking of kernels) and fully or partly transparent (to see the product) will increase sales. Smaller amounts (50–100 g) for individual snack portions should be in plastic or aluminum sachets. Larger packs (up to 500 g) for home use, should be robust, attractive, and designed to conserve the products. New packaging material could be explored, sourcing from Ghanaian or Nigerian packaging suppliers.
- Supply low-end markets with lower grade/mixed cashews, and market cashews' African origin and healthy benefits to increase sales.
- Cashew processors/roasters could develop direct contacts with hotels to increase their sales. There is also some possibility for providing hotel-branded products to larger hotels and chains.
- Service stations are a strong market in other countries and could be developed in Benin, as people are beginning to use formal service stations more regularly. Only a few service stations in Cotonou have shops, and none currently distribute cashew products.
- Airport and gift shops are a promising niche market. The one airport gift shop sells an estimated 70 kg/month of cashew products, all from one processor. Very few other gift or airport shops of this sort exist in Benin however.
- Dry roasted and salted cashews have good potential for growth as they are not readily available in Benin, and consumers interviewed liked them a lot. Black peppered cashews also have potential.

## 5.2 Burkina Faso: Capitalize on Export Opportunities

Burkina Faso, with 14.3 million inhabitants and a per capita GDP of \$1,300, produces 5,000–15,000 MT of raw nuts annually for export through Côte d'Ivoire and Ghana. There are three significant export-oriented industrial cashew processors in the country (capacity of 2,000–2,500 MT annually with 600 MT in 2006, its first year) and an estimated 2,000 individual cottage processors.

Cashews—as a snack or cashew butter—are widely distributed in supermarkets and small shops in Ouagadougou and Bobo Dioulasso. The cashew retail price is \$9.80/kg in supermarkets. Sales are highly seasonal, peaking in October–December (holiday period) and January–May (cashew nut season). Supermarkets buy directly from the industrial processor or through wholesalers who buy from small local processors, but they face irregular deliveries and occasionally run out of stock. Overall, volumes of sales are low, there is little variety in flavor, and simple plastic sachets without labels or brands dominate the market. The quality of the cashews is perceived as low, probably also due to the poor packaging.



**Cashews for sale at a roadside stand in Burkina Faso**

### **Best Practice: Cashew Butter**

Cashew processors in western Burkina Faso have had considerable success with cashew butter. They grind up small broken grades and sell the butter on the local market in small plastic jars in some supermarkets and by the bowl in the occasional markets. The product is inexpensive—\$0.20 for a small bowl (about 0.25 liter)—and is used as a spread on bread and in sauces as a replacement for peanut butter. Cashew butter is popular in small producing villages, but is still little known in urban centers.

### **Opportunities**

- Burkina processors could expand their presence in Côte d'Ivoire, Ghana, and Mali, as their finished products (if presented in attractive, resistant packages, and/or with appealing labels) are considerably cheaper than those produced in those countries. Selling bulk white kernels—to local roasters for

finishing, packing, and distribution, or cheap finished retail packages—to Côte d'Ivoire and Ghana is another option. Note that developing retail markets in these countries requires partnering with a trader or otherwise finding a way to cheaply and efficiently transport and distribute products over long distances. Bulk products face fewer distribution difficulties.

- Tourist markets in Burkina Faso and Mali are relatively developed and can be further exploited by adapting packaging and labels to reflect the unique Burkina or Mali origin.
- Developing simple labels with brands and product information will help develop customer loyalty and build confidence in quality. Improved, hygienic packages and attractive labels could permit small shops to sell to wider range of consumers.
- Well-packaged sachets of sorted broken grades could reduce retail price, increasing sales to consumers who indicated that they would buy broken kernels if they were cheaper than whole nuts.
- Processors can increase their revenues by selling directly to shopkeepers in areas where logistics permit—shops close to processors' location, or grouped together in big cities.
- Service stations are a well-developed market for local processors, but volumes can be expanded. A low-cost solution is to do in-store promotions, including posters and special cashew displays.
- Few luxury hotels in Burkina Faso sell cashews. Well attended festivals—international film and artisan fairs—offer unique occasions to do special promotions in hotels.
- Airport shops are currently not selling cashews and offer a potential distribution channel.
- Special gift formats for cashew products involving packaging, special displays in supermarkets, more targeted promotion, and communication on the African origin of the cashews could increase cashew sales in Burkina Faso.
- Sell more cashew secondary products such as cashew cookies, since people who tasted them liked them a lot.

### 5.3 Côte d'Ivoire: Grow Sales in Local Markets

Côte d'Ivoire, with a population of 18 million and a per capita GDP of \$1,600, is the biggest raw cashew nut producer in Africa. Its production is now >200,000 MT, from trees mainly in the northern part of the country. There are currently two industrial-scale processing facilities (with 10,000 MT combined capacity and 95% exported, some to organic and fair trade markets) and one semi-industrial processing cooperative (with 100 MT capacity and growing to 130 in 2007).

On the local market in Abidjan, cashews are sold mainly in plastic sachets with stick-on labels (100 g) and aluminum sachets (125 g) for an average price of \$13.40/kg in small road shops and up to \$20.80/kg in supermarkets or \$24.10/kg in gas service stations—making prices for cashews in Côte d'Ivoire the most expensive in the region, along with Ghana, and more expensive than any other snack food except for imported mixed nuts.

The majority of small roadside shops source their cashews from Burkina, and they have little variety in product and plain packaging (unlabeled plastic sachets) but prices are 40% cheaper than in the supermarkets. In supermarkets and gas stations, many distribution channels exist and quality and packaging are good, but prices and lack of promotion limit sales growth, volumes are low, few flavors are available, and there are no secondary products on the market. Luxury hotels and restaurants in Abidjan use cashews for cooking and baking or as an appetizer. Hotels are interested in cashews packaged under their own label. Service stations are the highest volume distribution channel in Abidjan,



*Ivorian cashews packaged in an aluminium sachet*

despite having the highest average price per kilo.

### **Opportunities**

- Ivorian retail prices per kilo are tied for highest with Ghana—but they spend less on packaging—indicating that Ivorian processors might have to analyze their operation to look at efficiency and see how they can reduce prices. Small-scale processors in Côte d'Ivoire should focus on developing the local market and becoming more efficient before looking abroad.
- Good conservation of nuts is important. For bigger quantities, consumers want to be able to close the pack easily for the next use.
- Processors should consider price-cutting promotions for service stations to increase sales volumes.
- Sorted broken grades in attractive packaging may reduce prices, allowing for broader consumption.
- Introducing new flavors and recipes could potentially increase sales.
- Cashews are used for celebrations, for example, birthdays and weddings. Tailoring packaging to these events, and creating special offers for these occasions might increase sales.

## **5.4 The Gambia: Replace Imported Cashews**

The Gambia, a small country with a population of 1.6 million and a GDP of \$2,000 per capita, produces some raw cashews (< 3,000 MT). In the cashew world, The Gambia is known for being (1) a port for the export of raw nuts from Guinea-Bissau and Senegal, and (2) a concentrated consumer market for cashew kernels since it is one of the major tourist destinations in West Africa (80,000–100,000 tourists per year, all concentrated in the small coastal region). The cashew processing sector is very underdeveloped in The Gambia: there is only one semi-industrial processor with a capacity of 5 MT of raw nuts per year.

Cashews are widely distributed in The Gambia and are sold in color-printed sachets (150 g) or tins (100 g) for an average price of \$26.40/kg in supermarkets. Cashews sell well, however, 75% of supermarkets import their cashews from Europe or Senegal and 50% of supermarkets sell cashews imported from Europe only. Supermarkets indicate that packaging and quality of locally produced cashews must be seriously improved to replace the imported cashews. Cashews sold in market stands originate from local processors and are 20% cheaper than cashews in supermarkets, and volumes sold are higher. However, quality varies widely and few products are sold under a recognized brand, reducing consumer perceptions of quality.



***The Gambia has excellent potential for expanding cashew marketing and consumption in its many hotels.***

### **Opportunities**

- The local market has potential. The Gambia has the second highest GDP per capita of the 10 countries in this study so consumers have relatively high purchasing power. Target local mini-markets/occasional markets and supermarkets frequented by locals and tourists (both for snack foods and as cooking ingredients).
- The tourist market offers considerable possibility for increasing sales of local and regional products, if labeling and packaging can be improved. Tourists often reside in self-service apartments and thus shop for groceries and snacks. This market seems ripe for advertising Africa-themed cashew packs with high-quality labeling. Other places include airport shops, service stations, tourist shops, and bars.
- Supermarkets and hotels need to be convinced of the quality and reliability of local and regional processors if they are to replace imported products with local and regional ones.
- Hotel mini-bars and gift shops are a potential market, but hotel managers must be convinced, as they are not accustomed to distributing food products in this format. Broken/roasted and salted cashew

bits could potentially replace the currently consumed peanuts in the upscale hotel bars and restaurants where tourists, expatriates and locals congregate.

- Because Indian and Chinese investments and expatriate populations are increasing, restaurants catering to these expatriates may be interested in using more cashews in their cuisines.
- Packages must be smaller, more attractive, and cheaper than the current selection while still meeting quality standards, including shelf life. Simple but colorful labels with basic information on the product will allow processors to develop consumer loyalty and build perceptions of quality.
- The introduction of cashew nuts in the cookies and biscuit chain, combined with a campaign to raise awareness about cashew secondary products and increase their distribution (cookies, caramelized cashews), seems to have high potential, as many consumers already appreciate these products.
- Popularizing the consumption of Lebanese sweets using cashews is a good way to involve the large Lebanese population in The Gambia.

## 5.5 Ghana: Tap Potential of Health-Conscious Consumers

Ghana, with a population of 22.9 million, a GDP per capita of \$2,600, and a large number of expatriates (15,000–16,000) and tourists (440,000 in 2006), has a relatively small cashew sector for its relatively large consumer market. Ghana produces an estimated 15,000 MT of raw nuts annually, but exports up to 45,000 MT of raw nuts originating in Ghana as well as Burkina Faso, Côte d'Ivoire, and Mali. The country has no export-oriented industrial processing facility currently operating, but there are at least five semi-industrial cashew factories (total capacity of 530 MT annually, actual production of 350 MT) and a few more under construction. Some semi-industrial cashew factories plan to export. However, Ghana has a relatively well-established and specialized roasting and packaging industry for cashews that sells cashews in plastic sachets and labeled plastic jars.

The average prices for cashew kernels are \$20.28/kg in supermarkets and \$21.18/kg in stands, small shops, and gas service stations. Ghana is tied with Côte d'Ivoire for West Africa's most expensive average retail price for locally processed cashews; they are even more expensive than some imported Asian cashews. It is unclear why, although the small size of Ghana's processing units and expensive packaging typical in this market are probably at least partly to blame. In the short run, if Ghanaian cashew processors cannot reduce their prices significantly, the Ghanaian market could become an import destination for bulk or retail cashew products from elsewhere in the region. High prices and low consumer awareness of cashews are main barriers to market growth. Also, as retail prices at stands and small shops are higher than in supermarkets, processors may not be delivering appropriate products to this low-cost channel.

Ghana offers good quality cashew products, but the products do not reach all potential points of sale and the variety of retail products is limited—only roasted/salted and plain varieties are available. Tourist areas and hotels, particularly outside of Accra, are especially underserved. Few hotels currently use or sell cashews, and volumes are low (with the lowest use in the touristy Kumasi and Cape Coast areas). Cashews are not sold to consumers through mini-bar systems or shops.



**Ghanaian companies offer well-packaged cashews to their consumers.**

### ***Best Practice: Personalized Labeling***

For Ghana's 50<sup>th</sup> anniversary of independence, Ghana processor SPB designed this sticker, linking the company to the festivities. Simple additions to an established label can differentiate a product and link it to an event or a particularly important retailer, increasing sales and improving the image of the product.



### **Opportunities**

- Ghanaian roasters could benefit from the considerable price gap between Ghanaian cashew kernels and kernels from inland countries by sourcing bulk cashew kernels from processors or traders in Burkina Faso and Mali.
- Consumers from across West Africa admired the durability and attractiveness of Ghanaian packaging and the quality of their product in focus groups conducted during this study, demonstrating that there are good opportunities for Ghanaian retail products in high-end regional segments, particularly in Nigeria and Côte d'Ivoire. Alternatively, Ghana could provide services to selected regional processors in roasting and packaging shelled cashews.
- Although current packages are very successful, more lower-priced alternatives are necessary to reach a broader market, especially for small stands and shops. It was also suggested to mix cashews with groundnuts to reduce prices and to offer smaller and cheaper packs suitable for a quick snack.
- Develop special offers for the end-of-year holiday season that includes special packaging (labels with Christmas designs, gift boxes) and promotions.
- Point of sale marketing (packaging and displays) to promote African (Ghanaian) origin and health benefits could increase sales.
- Target local people with moderate to high incomes. For example, promote cashews at universities where the future moderate to high income earners are, or create cheaper packs for primary and secondary school students.
- Improve distribution to tourist areas outside of Accra, such as Cape Coast. Small packs adapted to the tourist market (attractive Ghana-related packages) may do well in hotels and hotel mini-bars.
- Retailers indicate that processors could do more public outreach and marketing, especially on the health benefits of cashews. Consumers in Cape Coast for example are uninformed about cashews.
- Promote cashew paste to use as a spread for bread and in soups.
- Roast cashews to make the nuts crispy.

## **5.6 Guinea-Bissau: Explore Export Markets in The Gambia and North Africa**

With a population of 1.45 million and a GDP per capita of \$900, cashews have a special place in Guinea-Bissau: Cashews are the largest agricultural crop, and the raw nuts generate 90% of the country's export revenues. Guinea-Bissau produces approximately 100,000 MT of raw nuts annually, and the quality is the best on the African continent, although the quality of kernels is inconsistent and could be improved. In the last 10 years, several processing initiatives have taken place, both public and private, resulting in three factories with a capacity of 1,000 MT each (although one is not in operation), two with capacities of 500 MT and 250 MT, respectively, and a network of 21 smaller factories with a combined capacity of 780 MT

annually. Of the combined 4,080 MT of processing capacity, about 2,500 MT is exported, 1,000 MT is not operational, and the remainder is sold on local or regional markets.

Although raw cashews are everywhere in this country, processed cashews can be difficult to find. Only a few shops sell cashew products, and distributors often run out of stock. Prices are relatively cheap, averaging \$12.16/kg in supermarkets and small shops and as little as \$2.00/kg in traditional markets. (This is likely a temporary situation, linked to the low price of raw cashew nuts after the collapse of the export market in Guinea-Bissau in 2006.) Small shops and service stations targeting high-income local consumers sell large quantities of cashews.

Although Guinea-Bissau boasts a wide variety of cashew products, distribution in the formal market remains underdeveloped. Several factors limit expansion of higher value cashew products: low personal income, price competition from traditional markets, inconsistent quality, fragile and unattractive packaging, and a lack of information on their health benefits.

Guinea-Bissau is very competitive as a supplier of bulk white kernels to roasters in Senegal and The Gambia. However, because it is the only Portuguese-speaking country in the region and it has a challenging road and transport network (including the port), exporters must overcome numerous constraints to trade in Guinea-Bissau.



***A major producer of cashews, Guinea-Bissau is one of few countries in the region offering retail sales of cashews in airports, as pictured here.***

### **Opportunities**

- Traders—or an association able to collect the production of small-scale processors and assure stable quality, a problem in Guinea-Bissau—would be well-positioned to increase exports into regional markets.
- Retail packages of Guinean cashews, even with mixed quality and poor packaging, would also be competitive in The Gambia and Senegal due to lower prices (supermarket retail prices are 40% less than in Senegal).
- Improve quality control in processing. Sort off-grade nuts to sell high-quality packaged broken kernels.
- Packaging requires improvement. Retailers request more attractive/colorful and resistant plastic packages. Packaging material must be clean and either fully or partly transparent. Good conservation of the nuts is a key element—the packs should be airtight and re-sealable for the next use. Labels should include attractive colors and the African identity of the products.
- Develop closer working relations with distributors and frequently check stocks to improve sales of the limited local market.
- Hotels expressed an interest in low-cost differentiated packages (with hotel name/logo) for sale in mini-bars.
- Explore new distribution channels, such as bars, nightclubs, and airport shops.
- Create special offers for special occasions, including special packaging and promotions for holidays, anniversaries, or weddings.
- Expand sales of more cashew-based products since they are appreciated by consumers, including cashew cookies, caramelized cashews, etc.

## 5.7 Mali: Import to High-End and Tourist Market

This Sahelian country, with a population of 11.9 million and a per capita GDP of \$1,200, produces less than 5,000 MT of raw nuts in its southern regions and houses no formal industrial or semi-industrial processors. The few roasters and salters obtain cashew kernels from informal cottage processors or Burkina processors. Cashew products are sold in simple plastic packaging (there is only one brand; most packages are unlabeled) at the cheapest price in the region, an average of \$9.96/kg in supermarkets and \$12.00 in small shops and boutiques. Although cashews remain a luxury snack, they are much cheaper than imported almonds, mixed nuts, or potato chips. Using this cheaper production for out-of-region exports is not feasible, due to very low capacity and a lack of quality control. For increased volumes in its market, Mali will have to depend on increased local processing capacity or imports from neighboring countries.



**Basic packaging prevails in the Malian market, as evidenced at this stand in Mali's Tonino Market.**

Cashews are widely available in Bamako: 90% of supermarkets, shops, and hotels sell or use cashews. Cashews are widely available in luxury hotels in Bamako (100%), but less often in mid-range hotels more common in tourist regions up-country. Cashews are mainly served as a free snack item and are not sold directly to customers through mini-bars. The quality (i.e., consistency) of the cashews is one of the key areas to improve.

### **Opportunities**

- Improve cashew distribution by supplying more small shops, especially in cities other than Bamako (Segou, Mopti).
- Make cashew packaging adequate to present as-is on a table. Use nice shape and materials. Good conservation of nuts is also important: Use airtight packs that are re-sealable for the next use.
- Developing simple and descriptive labels will increase perceptions of quality and develop brand loyalty in supermarkets and service stations. Labels could also describe health benefits and the African and artisanal origin of cashews to increase consumer interest.
- With 140,000 foreign tourists annually, there is enormous potential for distribution in tourist cities like Mopti and Segou, currently completely underutilized. Processors should target tourist areas of Mali, where cashew distribution is low, either directly or through partnerships with wholesalers active in these areas. Small, attractive, African-themed packages will potentially lead to greater direct sales to tourists and through mini-bars, although local processors currently lack the capacity to develop these products without assistance.
- Hotels in Bamako source cashews from nearby supermarkets, which is relatively expensive. Direct relations with processors (from other countries) may reduce price and increase volumes.
- Developing more cashew-based products seems to have potential since consumers appreciated them, including cashew cookies, caramelized cashews, etc.

## 5.8 Nigeria: Increase Marketing and Distribution Efforts

Regional economic giant Nigeria, with a population of 135 million and a per capita GDP of \$1,400, has a relatively young, but large, cashew sector and the largest potential market for cashew products in the region. The country produces approximately 80,000 MT of raw nuts, of which 50,000 MT are exported. At least six industrial-sized factories and four semi-industrial facilities form the region's largest processing industry (with 23,600 MT installed annual capacity and 2006 production of approximately 16,000 MT). Factories are owned both by an international company and local entrepreneurs. Two industrial-sized factories recently started operations, in which most installed capacity is intended for exports. Currently, Benin is exporting small quantities of retail and bulk cashew kernels to Nigeria; this is likely linked to shortages of supply in Nigeria and may be short-lived, as Nigerian cashew processors sell cheaper products than many coastal countries in West Africa. At present, the Nigerian domestic market for cashews is considerably more interesting than the regional market for domestic processors due to its size, familiarity, and potential for growth.



**Rows of cashews line the walls of a processor in Nigeria. Nigeria's huge population offers excellent potential for increased consumption.**

Cashews are a well-developed product in Nigeria, found in a wide variety of venues not seen in other West African countries, including airlines and hotel mini-bars. The market for cashews is growing steadily in high-end segments of the Nigerian economy due to record oil revenues and general economic growth. With an average supermarket price of \$16.32/kg, Nigeria is a mid-priced producer, cheaper than Côte d'Ivoire, Ghana, Senegal, and Togo and equivalent to Benin. This price is due to the low cost of raw cashew nuts, efficiencies created by Nigeria's larger cashew factories, and greater use of broken grades in high-value supermarket products. Glass bottles and plastic and paper sachets are the most common packaging materials used in Nigeria, but many retailers requested more plastic packaging to reduce breakage.

Cashews are widely sold in supermarkets in Lagos and Port Harcourt with good volumes. Multiple flavors and types of packaging are available. However, no secondary cashew products are available, despite strong sales of broken grades in supermarkets—rare in West Africa. Also, 20% of supermarkets in Lagos and Port Harcourt sell cashews originating from Europe or the Middle East. Many stands sell cashew products at prices 25% less than supermarkets and have a good variety of packages and flavors available, including some branded products produced by formal local processors.

Cashews are also widely distributed in hotels in Lagos and Port Harcourt. They are sold through hotel mini-bars and gift shops and are used in cooking, and a wide variety of flavors is available. Retail prices are high (small packages average \$43.00/kg), but products still sell well. A third of luxury hotels are interested in packaging cashews under their own label, but few are doing this yet. Managers interviewed said insufficient quality and packaging were the main limitations to increasing hotel sales. One domestic airline distributes free 20-g packages of cashew nuts to passengers.



#### **Best Practice: Hotel Room Mini-bars**

At least one processor in Nigeria sells good volumes of cashews through hotel mini-bar systems. Mini-bars are small collections of goods placed in hotel rooms for sale to the client, such as cold drinks (kept in a small refrigerator) and packets of biscuits or cashews. If anything is consumed, the items are added to hotel bill of the customer, allowing the client to have a snack in the comfort of the room, and the hotel to increase its sales. The processor sells small, attractively packaged sachets of cashews (shown at left) to hotels, which stock them in mini-bars with excellent results. This increases sales to mid- to high-end tourists and travelers.

#### **Opportunities**

- Consumers would respond favorably to improvement in cashew nut grading and sorting in order to access better quality and more consistent products.
- Processors could use more in-store marketing—stands and posters—to draw attention to cashews and their health benefits.
- Smaller packages, adapted to snacking while traveling, and specialized displays may increase sales in service stations.
- High-quality plastic sachets and jars may sell better than glass bottles in supermarkets.
- Greater attention must be paid to quality to succeed in the demanding market of hotels. Companies that package cashews should develop the capacity to produce high quality custom packs for large hotels, in partnership with packaging suppliers.
- Airlines are a good potential market for established brands with excellent quality labeling and small packs. Major airlines often subcontract the supply of all food and beverages to local or international catering companies: Speak to these companies for opportunities.
- All recipes (roasted and salted, black-peppered, and spicy) were liked by participants in the group interview. Diversifying the types of cashew nuts available may be a good way to increase sales.
- The potential for secondary cashew products such as cashew cookies, which are not currently distributed in Nigeria, is growing.

## **5.9 Senegal: Improve Product Quality and Packaging**

Senegal, with a population of 12.5 million and a per capita GDP of \$1,800, produces most cashews in the south of the country (Casamance, Kolda, and Fatick). Total raw nut production is estimated at 15,000 MT annually. Senegal also exports raw nuts from Guinea-Bissau and Mali through its ports in Ziguinchor and Dakar. Senegal has no industrial processing facilities, 1 semi-industrial facility (exporting part of its production to the fair trade market in Europe), a network of approximately 15 smaller scale processors, and frequent informal cottage processing units in the cashew-producing south. Total processing capacity in Senegal is 350 MT of raw nuts per year. Additionally, there are four roasters and packagers.

Cashews are sold in a wide range of venues in Senegal. Retail cashew prices in supermarkets average \$18.64/kg. There is a good range of packages, pack sizes, and flavors. However, per shop sales are quite low. The vast majority of vendors say that they run out of stock occasionally, and approximately 30% has returned product to the processor due to quality problems. Consumers indicate that they have difficulty finding cashews.

With 17,000 expatriates and almost 800,000 tourists a year, the hotel and restaurant market has major potential in Senegal. Currently, many luxury hotels use cashews, but only in small volumes. All hotel managers had run out of stock at some point or various points, and 50% had returned product to suppliers due to poor quality. Hotel managers indicated that processors do not regularly verify if hotels need to be re-supplied. Only one hotel of six visited sold cashews to consumers. Most service stations sell cashews, but in small volumes and at relatively high prices (\$20.20/kg). Distribution in smaller cities like Saint Louis can be improved. Small shops are also an underdeveloped channel, where retail prices are 30% less than in supermarkets, and these shops pay on delivery.

Plain, roasted and salted nuts are the most frequently purchased and preferred types of cashews. Participants in the group interview indicated that they would buy broken kernels if they were cheaper. People eat cashews mainly at home, but also while they travel, making distributions at service stations and airports a good option to increase sales. Most people did not know that cashews are grown in Africa, and the majority indicated that they would purchase more if they could buy 'African labeled cashews'. Quality of cashews is inconsistent: Cashews sold on the street sometimes contain sand but cashews sold by established roasters and salters are good quality. Packaging materials can be improved. Plastic cartons popular in Senegal are fragile and may not hold up in transport.



***This Senegalese processor uses packaging with an African theme to attract consumers' attention.***

#### **Opportunities:**

- Processors need to work more closely with retailers to ensure better distribution, particularly between processors based in southern Senegal and retailers in the North. Distribution is a major obstacle to increased sales in Senegal.
- Point of sale marketing (packaging and displays) to promote the health benefits of cashews could increase sales.
- Processors could offer hotels better service and distribution. Specifically, with better relationship management, efforts could be undertaken to increase sales in hotels, such as putting cashews into mini-bar systems.
- Target small street-side shops and bakeries, medium and larger hotels, to increase visibility and consumption.
- Improve information on labels to include ingredients/nutrients, origin, and an attractive design.
- Higher-quality retail packages—particularly small aluminum sachets—are good candidates for export to The Gambia and Francophone North Africa, including Mauritania, Morocco, Algeria, and Tunisia. (The potential of this market should be explored in a market study focused on these areas. For now, it appears that Senegalese cashew prices must decline to be competitive with Asian imports in North Africa.)

## 5.10 Togo: Promote Cashew Consumption in Local Market

Togo, with a population of 5.7 million and a per capita GDP of \$1,700, has a relatively small cashew sector with an underdeveloped consumer market: Less than 5,000 MT of raw nuts are produced annually. Togo has one semi-industrial processor with a capacity of 80 MT (exporting 90% to Benin and Ghana) and a few cottage processors.

There is little distribution of cashews for consumption in Togo, and average supermarket prices average \$18.92/kg, among the highest in West Africa, especially given relatively poor packaging (mainly unlabeled recycled liquor bottles). Imported cashews from Benin dominate the high-end consumer market. Cashews are not yet well-known by most of the population: People are not accustomed to eating them regularly.

Most supermarkets sell cashews in Lomé, but volumes are low and 40% of supermarket managers are dissatisfied with the quality of the distributed cashews. Market stands and shops also sell cashews in small amounts at prices that are 50% cheaper than in supermarkets. There are several large (150+ room) hotels in Lomé, but none use significant quantities of cashews: Only small amounts are used in cooking.



**Cashews must be promoted in order to compete in Togo's snack market.**

### **Opportunities:**

- Increase the general promotion of cashews, especially of their health benefits and African origin.
- Higher quality packaging and labeling may allow processors to increase their presence in local supermarkets.
- Small, attractively labeled packages of sorted broken grades at lower prices may permit more people to buy cashews.
- Attractively packaged, durable sachets of cashews could be introduced into the mini-bars of many hotels in Lomé.

## 6. CONCLUSIONS

### 6.1 Findings

The study found that cashews are well-known, popular, and widely consumed by urban populations in West Africa. Though perhaps not an everyday food, cashew kernels are a mature product in urban West African markets, associated with quality and luxury and widely available in urban settings. Indeed, cashews may be consumed in certain upper-class segments of African society with greater frequency than in Europe or America due to a lack of a wide range of substitutes with similar associations.

**High prices, given the average income, remain the principal constraint to consumption.** At writing, WW320<sup>9</sup> cashew kernels were trading at \$2.05–2.10 FOB (Free on Board) Cochin/Tuticorin India, which translates to \$4.42–4.62/kg. The average supermarket retail price in West Africa of \$16.67 is \$12.00 higher than the going rate of raw kernels, a large sum to cover the costs of roasting and salting/seasoning, packaging, transport, distribution, and retail margins. This price differential is due to:

- **Small-scale production:** The semi-industrial facilities supplying the local market have relatively high fixed costs (in terms of building and equipment) and little consistency in their level of operational use. Because the facilities are mostly run at reduced or seasonal production capacity and staff do not have sufficient training or systems to optimize productivity, the costs of operation are higher relative to export-oriented facilities. Also, the larger facilities often (but not always) have better access to finance and usually have acquired their working capital at better interest rates.
- **Inefficient distribution:** As this study pointed out, most processors and/or roasters/salters distribute their products themselves. Given the small size of the factories and the limited number of staff, distribution and marketing is not specialized or approached in a strategic or full-time manner.
- **High packaging prices:** Limited availability of packaging equipment and materials in West Africa and relatively high prices drive up final product prices for ready-to-eat cashews.
- **Low price of broken nuts:** Prices are also high due to the low prices paid for broken nuts (if they are sold at all), which forces processors to charge higher prices for whole nuts. Broken nuts comprise 20–40% of production for most cashew processors, and solving the marketing problem for this product is important for the development of the local cashew sector. This is also an important issue for the large export-oriented processors: Although most declare that they can export 100% of their production, broken grades are often difficult and slow to sell on the world market. As export production increases across West Africa, a large supply of fairly cheap broken grades will become available in many West African urban centers, which roasters could use to drive down the price of cashew products and increase cashew demand—if they can solve the perception problem that off-grades currently face.

**A narrow range of uses limits consumption to a small minority.** Small broken grades—bits and small white pieces—will always be more difficult to sell for direct consumption. For this reason, it is important to develop secondary uses for cashews. Cashew nuts are used in pastries, breads, cakes, meals (in salads, soups, sauces, chicken-based main dishes, deserts, etc.) in India, Brazil, Southeast Asia, Europe, and the U.S. Diversifying the use of cashew nuts is a major challenge to significantly increasing the sales and consumption of cashew nuts in West Africa. This entails developing more cashew-based products and raising awareness about these products among restaurants and cooks (for cashew-based dishes), bakeries and pastry shops (for cashew cakes, breads, and sweets), food processors (cashew cookies or cashew butter), and all retail outlets. These efforts will not only increase demand for broken grades, they will allow cashews to be sold to a wider class of consumers not interested in or able to purchase expensive whole roasted kernels.

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<sup>9</sup> Whole white cashew kernels, 320 per pound

## 6.2 What's Next?

There are many trends and opportunities for expanding the cashew market in West Africa, but further research will be necessary to fully capitalize on them. Most future market development will depend on specific and strategic initiatives from processors and roasters/salters themselves. However, they could also work together to optimize results for everyone, and leverage business organizations—Chambers of Commerce, Export Promotion Councils, or NGOs—for specific tasks.

The authors of this study recommend the following:

- **Market opportunity study tours for cashew processors:**
  - **To Nigeria** for processors in Benin: Though language differences deter many French-speaking Beninese from traveling to Nigeria, Beninese processors could gain a better understanding of the Nigerian market and its opportunities.
  - **To Senegal and The Gambia** for processors from Guinea-Bissau: Guinea Bissau's processors could increase their knowledge of those markets and meet roasters likely to buy kernels.
- **Raise awareness among potential distribution channels in urban consumption centers and tourist areas in Mali and Togo**, countries where cashew markets are the least developed.
- **Train local processors/roasters on packaging:** Workshops of organized professional associations at country levels would increase processors' knowledge of packaging: including methods and materials, suppliers, costs, investment required to set up packaging facilities, and label design (logos, nutritional information, and bar-codes for supermarkets, international food safety standards).
- **Analyze regional transport costs and ex-factory prices of semi-processed white kernels, to lower consumer prices wherever possible.**
- **Explore regional opportunities for trade of cashew kernels:**
  - From Burkina Faso to Côte d'Ivoire, Ghana, and Mali
  - From Benin to Côte d'Ivoire, Ghana, Mali, Nigeria, and Togo
  - From Guinea-Bissau and Senegal to The Gambia, Mali, and potentially to western North Africa (mainly Morocco, and Tunisia)<sup>10</sup>
- **Market the healthy benefits of cashews:** From product names and labels to posters at retail points, there are several ways to advocate the health benefits of cashew nuts. Retailers in all 10 countries studied considered health-related promotions of cashew to be a major way of increasing consumer interest. According to retailers, upper-income African consumers are health-conscious.
- **Expand the market for secondary cashew food products:** A major challenge to increasing the sales of broken kernels is to find industrial food processors likely to develop and commercialize cashew-based products or products using cashews as an ingredient on a large scale. Establishing partnerships with large food processing companies would ensure significant sales volumes for processors. This would also require developing and promoting cashew-based products able to be produced industrially (and meet sanitary standards and have suitable shelf life) and convincing large food processors and distributors to include more diverse cashew products in their product lines.

This study has shown that, with targeted efforts, cashew consumption can be increased in West Africa. Sufficient numbers of managers of distribution channels have indicated interest in and potential for selling more cashews—provided consistent quality, attractive packaging, and when possible, reduced price. Consumers have indicated that they like the product and are interested in buying it, especially if lower-priced products are introduced and health statements and African origin are communicated. Communicating with potential distributors in supermarkets, restaurants, hotels, etc., and identifying their exact needs can help processors to optimize their sales and target consumers who are ready to buy.

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<sup>10</sup> This study did not research the retail cashew market in western North Africa. A few processors have visited Morocco and were positive about market opportunities there.