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Market Intelligence Report: Alternative Markets for Nigerian Sesame Exports

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Introduction

Sesame is a major export of Nigeria and attracts foreign direct investment for the purposes of export. From 2007-2009, Nigeria was the third largest exporter of sesame in the world, exporting an annual average of more than 129,000 tons. Despite this status, Nigerian sesame exporters could pursue alternative markets, especially China and South Korea, which are not currently supplied in any significant volume. Understanding these markets as well as trends in alternative markets could improve prospects to increase exports of Nigerian sesame seed overall.

The Nigeria Expanded Export Program (NEEP), a subprogram of the USAID Worldwide Support for Trade Capacity Building (TCBoost) program, is a demand-driven, enterprise-level program intended to expand Nigeria's non-oil exports. The program works with "client" exporters who, with technical assistance and training, can expand their exports. NEEP clients include several sesame exporters who—along with NEEP management—decided that a market intelligence report on sesame import markets, with an emphasis on Asian markets, would be valuable in identifying prospects for Nigerian sesame exporters and expanding exports. This report describes major markets and provides information and data on import volumes, supplier countries, and regulations that govern import of sesame seed with an emphasis on Asian markets.

Readers should note that regulations for all countries were not available and that most qualitative information on such issues as procurement has been extracted from primary sources. Trade data were obtained from the Food and Agriculture Organization (FAO) Statistics Division; however, data was only available through 2007. Agricultural and production data were available through 2009. To maintain consistency, we use the FAO data for agricultural production and crop processing, and trade data from Trade Map, a trade statistic consolidation website managed by the International Trade Centre (ITC) in Geneva. Tariffs were determined using Market Access Map, another service offered by the ITC.

The present report expands on a previous report, "Overview of the Nigerian Sesame Industry" published by USAID/Nigeria in 2002. Readers may want to refer to the 2002 report for more background on Nigerian sesame, specifically agricultural aspects of production and processing beyond the scope of this report. While much of the data presented in the 2002 report remain relevant, much has changed in trade patterns in the global sesame market, including growth of Nigerian sesame seed exports. The updated information should prove valuable to Nigerian sesame producers and exporters.

1. Global Sesame Trade

The global trade of sesame exceeds 1 million metric tons (MTs), with Ethiopian exports accounting for approximately 23 percent of exports (255,000 MT). Trade in sesame is dominated by a few importers and exporters. The top exporters are Ethiopia, India and Nigeria, with each exporting more than 100,000 MT, followed by a second tier of exporters in the 50,000 MT range including Tanzania, Paraguay, and Myanmar (see Table 1).

Table 1
Metric Tons of Sesame Seeds Exported, 2007-2009

Exporter	2007	2008	2009
World	1109205	1054594	1,084,983
Ethiopia	139653	130977	255783
India	302308	255272	177347
Nigeria	147004	129615	110806
United Republic of Tanzania	24887	31776	71803
Paraguay	44941	40287	60717
Myanmar	56980	100332	60238
Burkina Faso			49518
Sudan		105541	45136
China	41491	42468	34048
Pakistan	26342	27304	29734

SOURCES: ITC calculations based on COMTRADE statistics

Sesame seed imports are dominated by China, Turkey, Japan, and South Korea (see individual statistics on Japan and South Korea in Section 2). Note that China is both an exporter and importer of sesame; China's demand, as reflected in the global market, is based on its domestic crop and rising domestic demand (see Table 2).

Table 2
Value of Global Sesame Seed Imports in US\$ Thousands, 2007-2009

Importers	2007	2008	2009
'World	1022574	1798060	1509301
'Developing Market Economies Aggregation	604435	1015568	1026300
China	168883	249375	387610
Japan	170842	374097	181929
Turkey	92263	122651	128433
Republic of Korea	68412	117522	112033
'Israel	37482	68167	52758
Chinese Taipei	24328	29655	43229
Mexico	12881	38918	25791
Jordan	16676	26020	25039
Ghana	2	3	21815

SOURCES: ITC calculations based on COMTRADE statistics.

2. Markets for Nigerian Sesame

Nigeria has increased its sesame exports dramatically in the last decade. Exports of sesame have increased 265 percent, from just over 41,000 MT in 2002 to almost 111,000 MT in 2009. This performance makes Nigeria the third largest exporter of sesame seed.

In 2009 the top markets for Nigerian sesame seed were Turkey, Japan, and Brazil (Table 3). This report focuses on Asian markets yet markets such as Brazil and Turkey should be considered when looking to expand Nigerian exports, especially given the sharp decrease in imports from Japan (see Figure 1).

Table 3

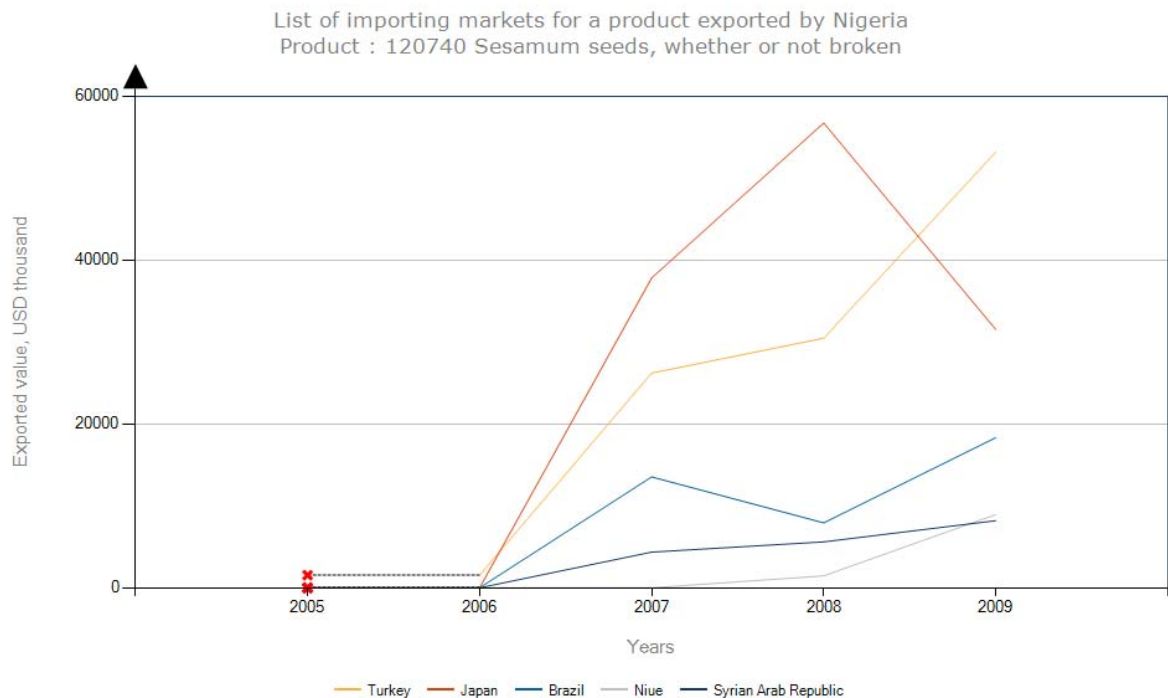
Value of Nigerian Sesame Seed Exports by Destination, 2005-2009 (US\$ thousands)

Destination	2005	2006	2007	2008	2009
World		2,623	118,244	151,300	194,395
Turkey		1,538	26,199	30,452	53,188
Japan		0	37,816	56,718	31,528
Brazil		0	13,527	7,921	18,322
Niue		0	0	1,453	8,935
Syrian Arab Republic		0	4,355	5,601	8,193
India		0	194	410	7,401
Afghanistan		0	0	0	6,546
Barbados		0	0	425	6,191
China		0	6,246	7,329	5,781
Chinese Taipei		0	0	0	5,139
Sweden		0	0	0	5,136
Italy		0	362	1,348	4,954
Singapore		784	8,581	11,305	3,568
Belize		0	0	5,788	3,238
Israel		0	0	422	2,672

NOTE: Niue is an island in the South Pacific Ocean that is in free association with New Zealand. It is likely a spot of "transshipment" for sesame to other importing countries.

SOURCES: ITC calculations based on COMTRADE statistics.

Figure 1
Nigerian Sesame Seed Importers



SOURCES: ITC calculations based on COMTRADE statistics.

ASIAN MARKETS

China



China is a major consumer of sesame products and has a significant import and export trade surrounding sesame products. Archeological records dating from around 2,000 BC show that the Chinese produced sesame for uses including direct consumption and sesame oil as ink. To this day, sesame is a significant food in the lives of Chinese peasants and city dwellers. A significant quantity of sesame seed is imported for the Chinese New Year season, a 15-day festival which ends in January or February of the traditional calendar year. Sesame seed balls (*jin deui*) are popular treats during this time, as the color and shape are associated with “luck” in Chinese culture. Chinese restaurants around the world serve *jin deui* as part of the dim sum buffet.

Chinese Sesame Statistics

China is the largest and most rapidly expanding market for imported sesame seed. In the early 2000s, China was one of the top three exporters of sesame seed by quantity, while concurrently importing about half the amount of their exports. This changed in 2009 when China imported

311,000 MT while only exporting 34,000 MT. In general, China imports oil-quality sesame seeds and exports food quality seeds.¹

Table 4

Value of Chinese Sesame Seed Imports by Supplier, 2005-2009 (US\$ thousands)

Exporters		2005	2006	2007	2008	2009	% of market
	World	124908	210873	168883	249375	387610	
1	Ethiopia	66995	109601	65398	57241	188143	48.5
2	Tanzania	14129	9460	10107	12066	37931	9.8
3	Mozambique	2609	5181	9786	25085	37078	9.6
4	Myanmar	4288	2500	17457	66595	34714	9.0
5	Sudan	19398	54722	13944	14219	27842	7.2
6	India	8557	10097	35820	48138	16234	4.2
7	Mali	386	7467	3774	6214	10847	2.8
8	Uganda	2252	3137	429	1724	8229	2.1
9	Nigeria	1134	4021	3701	1651	7492	2
10	Pakistan	1055	1324	614	6342	3635	0.9
11	Paraguay	1293	134	533	1119	3183	0.8

SOURCE: TradeMap, 2009.

Nigeria was the ninth-ranked exporter to China in 2009 with about 2 percent of the market on a dollar basis. It is interesting to note that other African countries are ranked in the top countries exporting to China including several of Nigeria's direct neighbors Mali (#7), Niger, and Cameroon.

Chinese tariffs for sesame are relatively low, ranging from 0-5 percent for most countries' exporters. For Nigerian sesame, the applied tariffs in 2009 were 5 percent while major competitors of Ethiopia, Tanzania, Mozambique, Myanmar, Sudan, and Uganda were 0 percent and India was half of Nigeria's at 2.5 percent. In total, in excess of 93 percent of China's sesame imports come from countries with zero tariffs on their sales to China.

This puts Nigeria at a significant disadvantage over all of the countries above it on the Chinese exporter rankings. Other factors are going to play a role in Nigeria's ability to compete in China; however as a commodity any price disadvantage that is not tied to quality is detrimental to trade.

Chinese Import Requirements and Restrictions

Outside of the tariff rate, information on Chinese import regulations for sesame could not be determined. It appears that Chinese importers purchase product based upon their own specifications, which include indicators such as moisture, oil content, volume weight, foreign material, acidity, and color. In this case, most Chinese buyers would purchase product based on

¹ American Sesame Growers Association. <http://www.sesamegrowers.org/worldstatusofsesame.htm>

samples and specifications and may require third-party certification of standards being met. (See definitions in the appendix.)

China's Sesame Exports

In 2009 the bulk of China's exports of sesame went to Korea, at nearly 88 percent of their total exports or US\$52,950,000. We were unable to determine if this volume falls under the Korean Tender system (see below) or is outside of the system. We assume that 100 percent of the exports would fall within the system due to the relationship between China and Korea; however we cannot be certain of this fact without digging further into the Korean records.

Table 5

Value of Chinese Sesame Seed Exports by Destination, 2005-2009 (US\$ Thousands)

Destination	2005	2006	2007	2008	2009	%
World	60665	55916	56822	82776	60253	
Republic of Korea	33689	41143	43507	55124	52950	87.9
Japan	23403	12539	11436	22049	4631	7.7
Turkey	0	0	0	1002	801	1.3
Australia	654	388	462	1457	346	0.6
Hong Kong (SARC)	488	478	385	396	280	0.5
Singapore	296	230	211	351	230	0.4
Chinese Taipei	34	112	62	306	225	0.4
United Kingdom	129	49	105	152	176	0.3
United States of America	117	182	174	222	152	0.3
Russian Federation	0	1	0	839	110	0.2
Canada	38	46	23	8	77	0.1

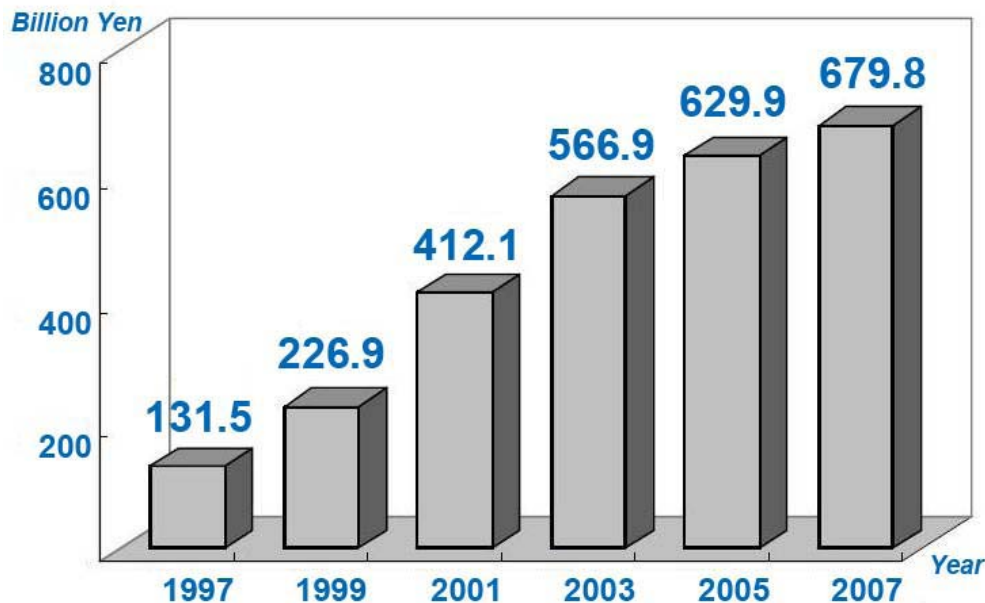
SOURCE: TradeMap, 2009.

Summary: The evidence of sesame exports from other West African nations (e.g., Mali, Niger and Cameroon) indicate that transport and logistics issues may not preclude Nigeria from increasing its market share in China; however, Nigerian sesame exports are currently subject to higher tariff rates than other African competitors and more information is required to understand Chinese import requirements, restrictions and quality standards.

Japan

Driven by highly educated consumers with significant disposable income, health food sales in Japan have grown significantly over the last decade. The Japanese External Trade Organization (JETRO) documents that retail sales in the health food market are increasing more than 500 percent since 1997, reaching nearly ¥700 billion (US\$814 million). Health foods sourced from all over the world find strong market demand in Japan.

Figure 2
Market Highlights Health Food 2008



SOURCE: JETRO, 2008

Consumers in Japan recognize the health benefits of sesame and consider sesame products to be natural health foods. Sesame products therefore have strong consumer demand in the Japanese market. Traditional Japanese cooking uses significant amounts of sesame oil for cooking and flavoring of foods.

Japan's sesame imports are used for products beyond consumption as seeds. A large portion of the imports of sesame seed are converted into high quality oil for use in food, cosmetic and pharmaceutical grade oils. The Japanese market for cosmetic and pharmaceuticals provides a unique opportunity that requires chemical characteristics and is not tied to the visible appeal of the product. While the non-food market for sesame oil and powder can be a profitable alternative and niche for sesame seed sales it is a difficult market to penetrate. This is particularly true with Japan as sales to cosmetic and pharmaceutical companies requires a completely different analysis than for food consumption with considerably less leeway for variances in product and characteristics between one lot and another. Coupling the unique characteristics of the cosmetic/pharma market with the difficulties of entering the Japanese market for any product

requires patience, the ability to answer many questions and to provide multiple samples to potential buyers.

Japanese laws allow for sesame oil processed in Japan to be labeled as “Product of Japan” even if the source of the seeds is outside of Japan.

Japanese Sesame Imports

Japan imported more than \$180 million of sesame seed in 2009, making it the second largest importer following China. Nigeria is a significant exporter of sesame to Japan, despite a significant decrease in trade from 2008-2009 (Table 6).

Table 6
Value of Japanese Sesame Imports by Supplier, 2005-2009 (US\$ Thousands)

Supplier		2005	2006	2007	2008	2009	%
World		153666	148415	170842	374097	181929	
1	Paraguay	17167	24598	31834	89710	44016	24
2	United Republic of Tanzania	14708	13503	19950	40917	34820	19
3	Nigeria	29290	33065	24528	77246	22319	12
4	Burkina Faso	8873	9647	16152	32666	18707	10
5	Myanmar	6599	14226	25856	19959	18301	10
6	Guatemala	12032	9737	10261	10230	13574	7
7	Bolivia	12920	11405	6493	7112	8395	5
8	Turkey	3464	4733	6699	4842	5292	3
9	China	24142	11898	11169	22118	4868	3
10	Mexico	2522	1768	2199	3675	2404	1

SOURCE: TradeMap, 2009.

There are three varieties of sesame imported into Japan based on color - white, black, and gold sesame. The breakdown of consumption is as follows:

- Approximately 55% for sesame oil
- Approximately 45% for roasted sesame seeds of which white sesame account for 60%, black 35% .and gold 5%.

Nigerian Exports to Japan

Nigeria is a major exporter of sesame to the Japanese market, with a 12 percent market share in 2009. This however, is down from a near 21 percent market share in 2008. The cause of this loss cannot be identified definitively, nor can the cause of the overall decrease of sesame imports into Japan between 2008 and 2009. But one can speculate.

For the decrease in total market volume in Japan, the overall economic downturn in 2008 may have allowed for national inventories to deplete between 2008 and 2009 when retail and industrial

buyers moved through their inventories and worked more on a just-in-time basis than previously. As to the decrease in Nigerian market share, information from the Japanese Ministry of Health & Welfare home internet page may be instructive. In 2008, Mitsui & Co. imported 730 bags (36,095kg) of Nigerian sesame seeds. However, aflatoxin² was detected and the cargo was rejected at the port. The exporter listed for this shipment was Maviga West Africa Ltd. of Lagos. While this shipment of only 730 bags is not a significant volume in and of itself, Japanese buyers tend to avoid risk. If one shipment is found to be contaminated with aflatoxin, it is likely that other shipments will be considered suspect and cancelled and that it will take significant time for the country to recover its reputation.

Japan Import Requirements and Restrictions

Japanese law provides for inspection of all foods entering the country, thus exporters can anticipate an inspection of product. In the case of sesame seed, one of the main inspections will be for aflatoxin, as noted above. Additionally sesame seed requires a “plant quarantine certificate³” stating that there is no “damage by noxious insects.” All imported products arrive at quarantine ports (air or sea) and are subject to inspection by Japanese officials.

No specific labeling requirements are applicable to sesame imports.⁴

With no domestic production of sesame seeds to protect and significant consumption and export of sesame products Japan places no tariffs on sesame imports. Barriers to entry for Nigerian sesame are minimal, and largely stem from competition in quality and oil content of the sesame seeds from other exporting countries like Paraguay and Tanzania.

Despite the above aflatoxin issue, Nigerian sesame has become widely accepted in Japan as high quality. From 2004-06 and again in 2008, Nigeria was the top supplier of sesame seeds to Japan. In both 2007 and 2009, Paraguay became the top supplier.

Japanese Procurement Process

A number of large Japanese companies import sesame seed for multiple uses. Companies include both processors and import trading companies, otherwise known as *shogo shoshas* such as Mitsui, Mitsubishi, Marubeni, Itochu (C. Itoh) and Kanematsu. Many of these companies have centuries of history—Marubeni has ties back to 1858 and offices around the world.

In the Japanese food supply system the interrelationships between importer, processor, and retailer are complex. Trading products directly with oil processors is often difficult even when direct contact and relationships are established. Traditionally Japanese food processors and retailers utilize a closely affiliated trading company, such as the *shogo shoshas*. They do this for a

² Aflatoxin is a mold found on grains and ground nuts. It is a recognized problem with Nigerian sesame and is being addressed by many organizations, including the WTO, which has issued an RFP for a study on Nigerian aflatoxin issues.

³ The certificate declares the safety of the imported good. The certificate can be issued by the exporting government or sometimes by the importing government.

⁴ However, good trade practices require labeling including weights, product, and origin.

number of reasons, including spreading risk, lower interest rates, long-established relationships, import/export expertise, logistics, distribution, and real estate issues. To try and circumvent and bypass the Shogo Shosha in a trade loop is often detrimental for the company who tries to work directly with the end users/processors or retailers.

While it is most likely that most major sesame importers in Japan are trading companies it is important to know the processors who have significant market share. Although suppliers can, and should, contact processors directly, the actual buying and importing will likely be done by the trading company, working in partnership with the processor. The following companies are a few of the notable processors of sesame seed:

- Kadoya (<http://www.kadoya.com/english/index.html>)
- Shinsei (<http://www.shinsei-ip.ne.jp/>)
- Takemoto (http://www.naturalimport.com/making_sesame_oil)

Japanese Quality Requirements

Companies use the “best practice” specifications presented in Table 7 for sesame seeds that will be imported for oil production.

Table 7

Japanese Specifications for Sesame Seeds for Oil Production

Attribute		Measure
1	Normal condition	Good sesame flavor and nearly clear
2	Color	Characteristic sesame color
3	Moisture (water) and foreign material	Below 0.25% (refined below 0.1%)
4	Specific gravity (25 degree centigrade)	0.914-0.921
5	Refractive Index (25 degree centigrade)	1.471-1.474
6	Acid Value	Below 4.0 (refined below 0.2)
7	Saponification number	186-195
8	Iodine value	103-118
9	Unsaponifiable matter	Below 2.5% (refined below 2.0%)

SOURCE: Personal interviews with traders at Pacific Trading Japan (Division of Kikkoman).

Japanese Sesame Product Exports

Despite having no domestic production of sesame seed, Japan is the world’s largest exporter of sesame oil. Japanese sesame oils have a global reputation for quality. The United States is the largest market for Japanese sesame oil accounting for US\$24 million (77 percent) in imports of the \$31 million US\$ total in 2009. Canada accounted for an additional 10 percent, with Hong Kong and China accounting for another 10 percent. See Table 8.

Table 8

Value of Sesame Oil Exports from Japan by Destination, 2005-2009 (US\$ thousands)

Destination		2005	2006	2007	2008	2009	%
'World		19897	22005	22298	29695	31108	
1	United States of America	16135	17192	17353	23309	24244	78
2	Canada	1802	2263	2082	2761	2491	8
3	Hong Kong (SARC)	448	944	1399	1641	1947	6
4	China	434	477	505	454	767	2.5
5	Australia	135	107	163	193	367	1.5
6	New Zealand	139	141	119	178	320	1
7	Netherlands	52	86	54	241	156	.5

SOURCE: TradeMap, 2009

Summary: Nigerian sesame exporters have historically enjoyed a significant portion of Japanese market share. The aflatoxin contamination incident of 2008 may have affected Nigerian market share, compounded by the global economic downturn that arguably encouraged Japanese producers of sesame value-added products to deplete their own reserves rather than acquire new product.

South Korea

Like their neighbors in Japan and China, Korean imports of sesame seed are primarily used for cooking oil, in pastries and snacks. Healthy foods in Korea are also a strong market segment and therefore the demand for sesame is tied to this growing demand.

The South Korean government delegates a tender process for sesame seed to the Korea Agro-Fisheries Trade Corporation (ATC). The ATC is a quasi-governmental body, and is responsible for price stabilization, farmer support, and export marketing. Their responsibilities include overseeing and regulating the import of sesame seed into South Korea through a tender process by which potential exporters offer product to export to South Korea. The ATC announces the tender, and once it acquires enough sesame to meet its quota, it sells the sesame seed through a domestic auction system. Current tariffs for most importers including Nigeria are 40 percent. It appears that the ATC purchase requirements are around 5000 MT per month on a consistent basis, which would indicate that they are not having specific demand requirements for inventory prior to Lunar New Years.

Korean Sesame Statistics

In recent years there have been no documented exports of sesame seed from Nigeria to South Korea. Most ATC tenders have been awarded to India (36 percent) or China (34 percent), with the balance split relatively evenly between Sudan, Ethiopia, and Pakistan. See Tables 9 and 10.

Korean Import Requirements and Restrictions

The ATC follows import standard requirements as described in Table 11.

Table 9

Value of Sesame Seed Exports to the Republic of Korea by Supplier, 2005-2009(US\$ thousands)

Supplier	2005	2006	2007	2008	2009	%
World	52565	83143	68412	117522	112033	
China	31266	40206	34238	51843	44073	39
India	9358	31426	27791	57064	38099	34
Sudan	5090	5716	1362	0	9554	9
Ethiopia	3118	1124	861	0	9327	8
Pakistan	1625	1678	2844	6641	7091	6
Bolivia	1438	696	776	586	1358	1
Myanmar	0	11	27	295	813	1
Paraguay	297	111	0	0	616	1
Mexico	154	228	401	1091	533	0
Venezuela	0	0	0	0	475	0

SOURCE: TradeMap, 2009.

Table 10

Volume of Sesame Seed Exports to the Republic of Korea by Supplier, 2005-2009 (Tons)

Supplier	2005	2006	2007	2008	2009	%
World	52977	85567	59720	63949	72966	
1 India	11136	38686	27825	31156	26364	36
2 China	27478	33081	25204	27923	25331	35
3 Sudan	6285	7078	1690	0	7100	10
4 Ethiopia	3769	1313	1072	0	6529	9
5 Pakistan	2034	2000	2828	3834	5084	7
6 Bolivia	1625	791	772	572	1011	1
7 Myanmar	0	19	18	162	486	1
8 Paraguay	306	117	0	0	458	1
9 Venezuela	0	0	0	0	319	0
10 Mexico	101	142	216	302	216	0

SOURCES: ITC calculations based on Korea Customs and Trade Development Institute (KCTDI) statistics since January, 2009.

Table 11

Korean Sesame Seed Import Standards

Attribute	Measure
1 Moisture	10% Max
2 Oil content	48% Min.
3 Volume weight	>580g per liter
4 Foreign material	1% max
5 Acidity	4.0 max

Attribute		Measure
6	Color	Whitish or bright yellowish white
7	Other color	2.0% Max
8	Others	Such kind of sesame seeds which has double skins (neither hulled nor non-hulled) is not acceptable. Shall not have stale or other smell.

SOURCE: ATC.

Korean Procurement Process

The South Korean governmental tender issued through ATC requires many more administrative efforts than sales to open markets like Japan and China. The successful offering company is determined exclusively by price, with the lowest offer getting the business. If the offered quantity is not sufficient to cover demand then additional awards are issued until the demand is covered. The bid process is handled via electronic bidding. Requirements include the following (ATC Korea 2010):

- **Agent.** The seller may designate an agent in South Korea to handle all aspects of the offer. While this is not required it is strongly recommended in most cases.
- **Bid bond.** The seller must issue a bond covering a minimum of 5 percent of the bid price. If the bidder(agent) deposits the bid bond; the bid bond shall either be paid in cash, cashier's check issued by banks, bank guarantee, or insurance policy covered for AT with the special clause stating that the benefit, in the bonded amount shall be paid. If the supplier deposits the bid bond, the payment has to be made, either in cash in US dollars, letter of credit in US dollars in accordance with the documents provided by ATC, or payment guarantee issued by foreign exchange banks.
- **Registration Documents.** Each company offering product against the bid needs to register with the government the following nine items:
 1. Bid Application Form
 2. Copy of the Certificate of Qualification
 3. Copy of Agency Agreement, signed by the supplier. The original must be furnished at bidding. (This does not apply to foreign suppliers who participate in bidding on their own.)
 4. Copy of Business Registration Certificate. A copy of local Business Registration Certificate for Foreign Suppliers (It shall be confirmed by Apostille or Korean Consulate).
 5. Company Seal. For foreign suppliers, a copy of valid identification card, such as passport.
 6. Legal pledge on the Seal to be used
 7. Power of Attorney
 8. Agreement to the Terms and Conditions of the General Instructions
 9. Supplier's Certificate

- **Performance Bond.** In addition to the bid bond the winning company or their local (South Korean) agent is required to open a performance bond. Forfeiture of the performance bond is possible from issues ranging from delayed shipment, refusal of acceptance into a South Korean port or failure to meet contract specifications.
- **Contract language.** The contract is written entirely in Korean.

Additional information on Korean sesame imports and bid requirements can be found at the ATC website www.at.or.kr.

Summary: The South Korean import market for sesame has historically been dominated by a handful of regional exporters such as India and China. Nigeria may be able to establish a foothold in the sesame market; however it is likely this would require significant investment, including identifying a partner to manage the tender process. The sesame market in South Korea is not an “open” market as in China and Japan, and there are many administrative hurdles to overcome before entering the market.

OTHER ASIAN MARKETS

Table 12
Other Asian Sesame Imports by Volume (Tons)

Importer	2008	2009
Chinese Taipei	29396	43025
Viet Nam	3616	14626
Malaysia	7870	8314
Thailand	5273	7665
Singapore	6249	6824
Indonesia	4061	6119
Democratic People's Republic of Korea	66	3409
Hong Kong (SARC)	1453	1447
Philippines	1035	984

SOURCE: TradeMap, 2009

Malaysia, like Japan, is both a major sesame seed importer and sesame oil exporter. Since 2002, India has supplied the majority of Malaysia’s imports. In 2009, Malaysia imported 8,300 MT of sesame seed, 7,800 (94 percent) of which were from India. Sesame imports in Malaysia are all duty free; therefore no country has a duty advantage over any other. India has a significant freight advantage over Nigeria and maintains strong political and social ties. This may account for the strong dominance of Indian sesame on the Malaysian market.

In 2009, **Vietnam** imported 15,232 MT of sesame seed, based on mirror data from exporting countries. Vietnam applies a tariff between 10-15 percent for all sesame imports, except on those from Myanmar, China and other Asian trading partners. Nearly 90 percent of Vietnam’s imports are from India. The only other significant supplier is Japan, building upon the prevalence of Japanese brands and Japanese expatriates living in Vietnam.

Taiwan also imports significant quantities of sesame seed. Taiwan imported 43,000 MT in 2009, of which 50 percent was from India and approximately 20 percent each from Thailand and Myanmar. Of significant interest is the fact that Burkina Faso comprised 3 percent of the imports into Taiwan and Nigeria was active in the market with 1 percent of Taiwan's imports. Most countries have a tariff of 12 percent into Taiwan with the exception of Guatemala. Guatemala had no reported exports to Taiwan in 2009; however, Guatemala has longstanding diplomatic recognition of Taiwan, which provides them with favorable tariff rates.

Summary: While sesame imports are significant in the Malaysian, Vietnamese and Taiwanese markets, Nigerian entry into these markets faces significant challenges due to these countries' historical and cultural ties with other producers in their "neighborhood".

OTHER GLOBAL SESAME MARKETS

In 2009, Nigeria became the largest supplier of sesame to Turkey and—conversely—Turkey was the top market for Nigerian sesame exports (Table 13). Turkey's imports of sesame seeds have increased from just over 70,000 MT in 2002 to a high of more than 107,000 MT in 2007. In 2009, Turkey imported just under 92,000 MT of sesame, making it the fourth largest importer of sesame seed in the world.

Table 13

Turkey's Suppliers of Sesame: Imported Quantities in Tons, 2005-2009

Exporters	2005	2006	2007	2008	2009	%
'World	86413	95057	107629	80194	91954	
1 Nigeria	5310	10570	15933	17451	30815	34
2 Ethiopia	32526	26207	39596	19408	17168	19
3 Mozambique	6846	10072	7742	1172	9528	10
4 Pakistan	4125	4820	7022	6663	7201	8
5 India	8965	10467	19597	24018	6775	7
6 Uganda	1681	4066	3139	3237	4891	5
7 Paraguay	399	0	1195	250	4252	5
8 Burkina Faso	36	1693	1857	1340	2883	3
9 United Republic of Tanzania	1186	930	262	109	2059	2
10 Sudan	5237	5064	2204	1218	1480	2
11 Afghanistan	10969	15496	5148	1363	1408	2

SOURCE: TradeMap, 2009

Turkey is highly protective of its domestic sesame market. Sesame imports from any country except Turkey's neighbors (who are not major sesame exporters) incur a tariff of 13.7 percent. In contrast, of the other major importers, with the exception of Korea's applied 40 percent tariff, none has a tariff over 12 percent for major exporting countries. However, Turkey's demand for Nigerian sesame seed has grown dramatically over the last five years. Sesame seed is used in many Turkish foods, including tahini, a peanut butter type paste made from sesame seeds.

Increased demand for Nigerian sesame seeds may be attributed to demand for higher quality seeds or aggressive efforts by Nigerian exporters.

Olam International, one of the world's largest suppliers of sesame seeds and who is present in Nigeria, has increasingly focused on Turkey as a growing market, and has increased direct sales within Turkey to avoid use of third-party importers (Olam International Limited Annual Report 2009).

The countries of the Middle East, primarily Syria, Israel, Saudi Arabia, Lebanon, Egypt, and Jordan also import a significant quantity of sesame seed. In 2009, Middle Eastern countries imported 10 percent of world sesame imports, down from almost 17 percent in 2008. Major suppliers to the Middle East include Sudan, Ethiopia, India, Pakistan, and Nigeria. Tariff rates to sesame seed importing countries in the Middle East are generally low.

3. Other Major Sesame Exporters

ASIAN PRODUCERS

Major sesame producers in Asia include Afghanistan, China, Myanmar, Pakistan, Thailand, and Vietnam. China is both a major exporter and major importer, though Chinese exports of sesame have dropped significantly since 2005, while imports have increased significantly. In 2009, China exported 34,000 MT of sesame seed, a third of what they exported in 2002, and a tenth of what they imported in 2009. Chinese exports of sesame seed were low in 2009 due to a decreased harvest as a result of inclement weather. China yield forecasts indicate a better crop in 2010 than 2009. Exports have also decreased as domestic demand, due to increased incomes, has increased within China.

MAJOR WORLDWIDE PRODUCERS

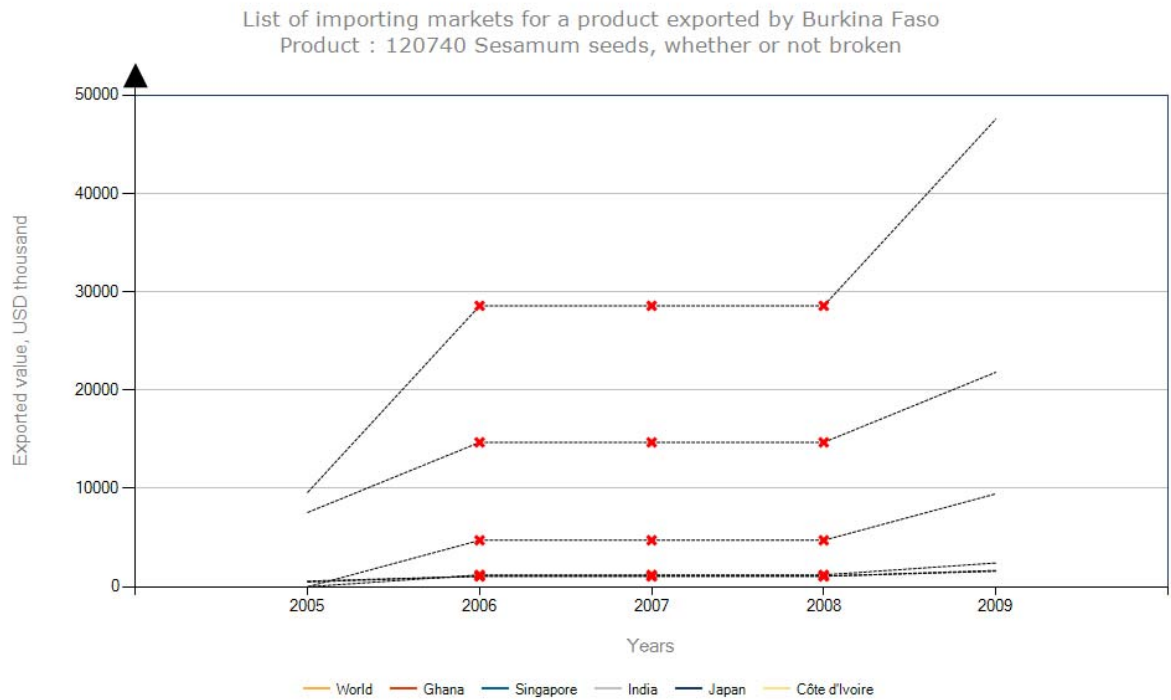
Other major competitors in the international market include India, Ethiopia, Paraguay, Sudan, Tanzania, and Burkina Faso. In the last decade, India, Sudan, and Ethiopia have controlled much of the export market. Ethiopia and Sudan benefit from location and proximity to large sesame importers. Sudan benefits further from membership in the Pan-Arab Free Trade Area, giving them free access to large sesame seed importers. Of the top 18 destinations for Sudanese sesame seed, Sudanese exporters pay tariffs in only two, Turkey and Korea.

Paraguay has become a major exporter, an occurrence partly attributable to the Paraguay Vende effort by USAID, in which the author was actively involved in marketing support. The Paraguay Vende program was carried out by USAID in 2004 and 2005 to increase production and sales of Paraguayan sesame seed. Since 2003, exports from Paraguay have increased over 800 percent, to 60,000 MT in 2009. Exports are expected to continue to increase.

Burkina Faso has increased their exports in recent years with growing market shares in multiple countries, with Ghana (45 percent) and Singapore (20 percent) being the two largest markets. Burkina Faso is also the #4 exporter of seeds imported into Japan in 2009. This positions them as a significant competitor with Nigeria into this market.

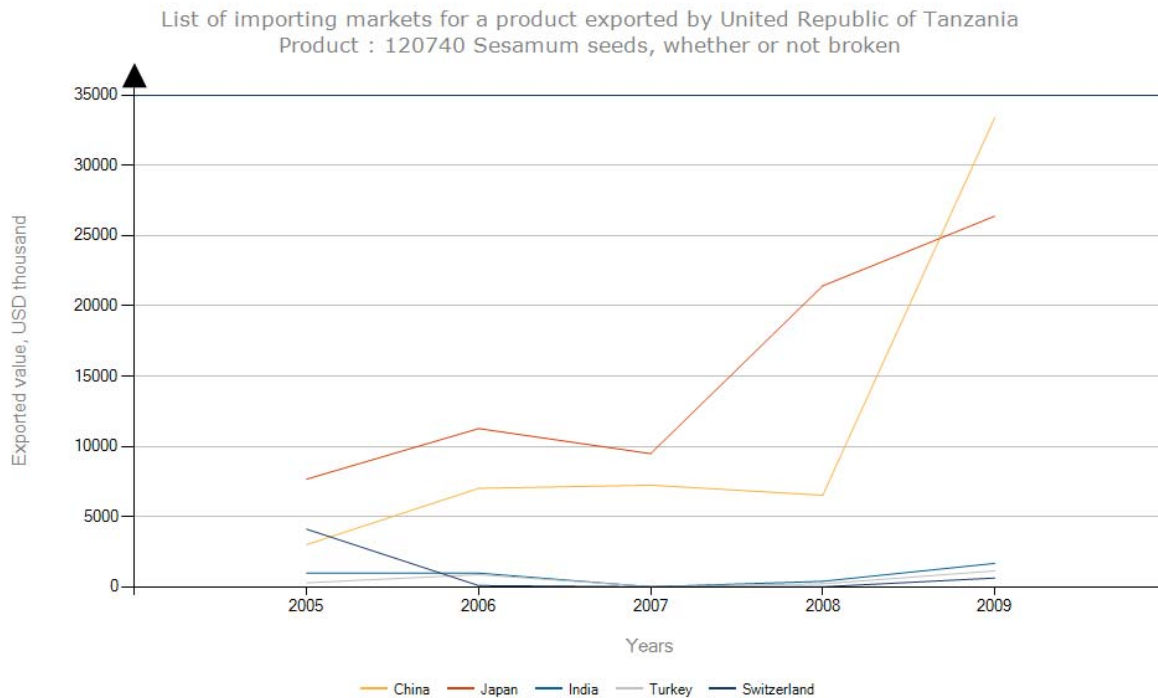
Tanzanian exports have also grown in the last five years to the point that Tanzania is the second largest exporter of sesame seed to China (behind Ethiopia and seven places above Nigeria) and the second largest exporter of sesame seed to Japan in 2009, behind Paraguay.

Figure 3
Importing Markets for Burkina Faso Export Sesame



SOURCES: ITC calculations based on COMTRADE statistics.

Figure 4
Import Markets for Tanzania Export Sesame



SOURCE: TradeMap, 2009

A review of the trends in the international sesame trade suggests the following opportunities for increasing Nigeria's sales:

1. Increased sales in Japan
2. Participation in Korean tender
3. Market in China
4. Expand business in Turkey and Brazil

Other global markets listed above, like Niue, Syria, India etc. exist; however, these markets are neither consistent nor significant. They should not be ignored and may provide opportunities for companies that can establish relationships with buyers in each of these countries. Nationally supported marketing effort in these countries with smaller imports may not be cost efficient due to their volumes and inconsistent demand.

4. Recommendations

The following marketing tactics can help Nigerian exporters pursue and eventually penetrate or expand exports in alternative markets discussed above:

- a. Arrange a seller's mission to Japan prior to "Foodex 2011" in Tokyo during March 2011. The selling mission would arrange meetings with the *Sogo Shosha's* prior to the show or at a minimum during the show.
- b. Participate in "Foodex 2011" with the target of finding an agent in Korea and making contacts for potential customers from other Asian markets. Premarket the show to arrange meetings at the show or participate in Health
- c. Participate in Food Health Natural Ingredients - China June 21 - 23 in Shanghai
- d. Participate in the Food Ingredient show in Sao Paulo in August 2011 with a target of getting customers in Brazil. http://www.ingredientsnetwork.com/events_south_america
- e. Participate in Food Ingredient show in Paris during November 2011
- f. Participate in "Oilseeds and Oils" annual conference (2010 edition October 17-19)

Participation in these markets will expose Nigeria to all major importers and traders of sesame. While some of the key players may not attend these shows efforts should be done to have meetings arranged prior to the shows so that the targeted customers can be exposed to Nigerian Sesame.

Do not participate in retail food shows like SIAL, ANUGA and the FMI but focus on industrial and commercial demand.

These tradeshows will only have value if the pre-show work is done to arrange meetings prior to or during the show and sufficient follow-up is achieved.

Bibliography

ATC Korea. 2010. *General Instructions bidding for Import Products*.

Food and Agricultural Organization (FAO)

JETRO. 2008. <http://www.jetro.go.jp/en/invest/reports/pdf/market1224.pdf>. Retrieved 9/11/2010.

Kadoya Japan. 2010. <http://www.kadoya.com/english/index.html>

Nigeria Expanded Exports Program 2010. <http://www.nigeriaexport.org>

SamHee Trading Company (SHTC). http://sh-intl.com/shtc/agri/specs_sesame.html. Retrieved 9/2010.

Shinsei sesame website. 2007. <http://www.aichi-brand.jp/corporate/type/food/shinsei-e.html>.

Takemoto. <http://www.takemoto.co.jp/take/gomae001.html>.

Trademap. 2009. http://www.trademap.org/Country_SelProductCountry_TS.aspx. Retrieved 9/13/2010.

Appendix A. Terminology

Term	Definition
Percentage	The weight proportion for the whole quantity
Moisture	It is measured by the method of 105°C drying
Oil content	It is measured by solvent extraction (through Soxhlet)
Volume weight	The weight of 1 liter of sesame seeds measured by Grain Volume-Weight Tester, Brauer Type
Foreign material	The weight proportion of 'foreign materials left on the sieve' to 'others passed through the sieve', when it is sieved by the grain sieve of 1mm sieve eye
Acidity	The number of mg of KOH required to neutralize free fatty acids included in 1g of oil and fat extracted by the solvent extraction method
Color	Unacceptable are sesame seeds discolored by moisture, vermin, heat, mold, etc.
Other color	The proportion of black and dark brown sesame seeds.

SOURCE: SHTC Trading Company.