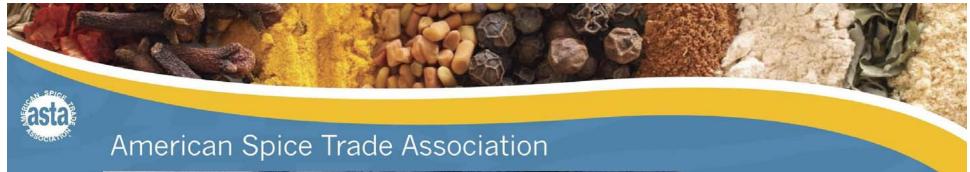


Sourcing Food Ingredients from China – Risks & Opportunities

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Happy Retiree

About Myself

- Food Consultant: 2007-Present
- Director, R&D/Technical Services, ConAgra Foods International: 1981-2007
- Visiting Assistant Professor, Department of Food Science, North Carolina University, Raleigh, NC: 1978-1981
- Research Associate, Institute of Biochemistry & Biophysics,
 Washington State University, Pullman, WA: 1975-1978
- MS, Ph.D. Food Science/Biochemistry, University of Massachusetts, Amherst, MA: 1971-1975

My Experience With Asia

- I was drafted to help a global sourcing group deal with agricultural chemical issues in Taiwan during the early '80s.
- From 1985 on, I helped identify alternate suppliers in Thailand, Malaysia, Singapore, Vietnam, and China.
- From 1985 on until my retirement in June 2007, I provided technical support for global sourcing and international marketing & sales. The bulk of activities were in China, Taiwan, Korea, Japan, and the Philippines.

Chinese Trivia

- In 2009, China had a 2.4 trillion US\$ foreign reserve, yet had almost none in the early '80s.
- Outside of Shanghai, there was one 18-hole golf course in China in 1985. There are 500+ today and at least 20 in Beijing alone.
- In 2005, China had 171+ cities with a population of over a million people.
- The richest person in China made his fortune in food & beverage, not in real estate or dot com.



Map of China

Population- Over 1.3 Billion.

Total Land Area -3.744 million square miles.

Cities Over 1 million Population -130+.

GDP- US\$2.7 trillion in 2007.

Balance of Trade - US\$ 177.5 billion surplus in 2007

Evolution of Chinese Spice Industry

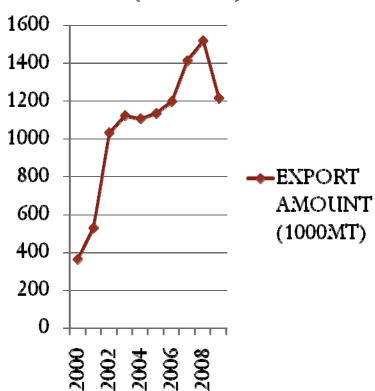
- Total acreage for grain production has decreased steadily. Acreage for horticultural crops has increased proportionally.
- At the IBC's Asian Spice Markets '96 Conference in Singapore,
 China was identified as a major producer of black pepper only.
 (Based on a report by Dr. Chomchalow of Assumption University,
 Thailand.)
- Today, Chinese garlic, chili pepper, star anise, and possibly cumin are all over the world.
- Chinese value-added spice extract and essential oil manufacturers are starting to make themselves visible now.

Chinese Garlic

- Based on 2008 data, China accounted for 80% of the world acreage for garlic production.
- China produced 11 million metric tonnes of garlic and accounted for 75% of the world production.
- India (4%), South Korea (3%), US (2%), and the rest of world (16%).
- About 13.78% was exported.
- 10% of the total Chinese export went to US, which represented 75% of the US garlic import.

Chinese Garlic Export (2000-2009)

EXPORT AMOUNT (1000MT)



YEAR	1000 MT	US\$ MM	US\$ /MT
2000	362.9	122.65	338
2001	529.0	195.35	369
2002	1030.2	333.67	324
2003	1121.6	340.77	304
2004	1105.4	401.89	364
2005	1133.5	543.16	479
2006	1197.9	778.58	650
2007	1411.2	852.79	604
2008	1516.4	618.24	408
2009	1214.4	636.24	524

Chili Pepper Production & Export

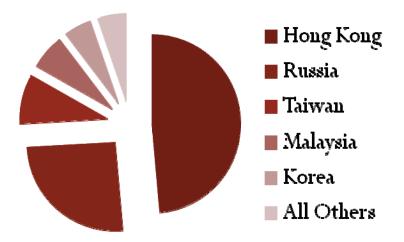
- In 2008, a total of 5.8 million metric tonnes of chili pepper was produced world-wide. India accounted for 36% and China for 11% of the total production.
- Among the 641,000 MT of chili pepper China produced, 11.62% was exported.
- Approximately half of the Chinese export went to Hong Kong.

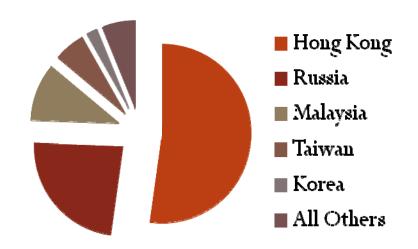
Where Did Chinese Chili Pepper Export To?

Year 2007 (Country/Area)

Percent (%) of Total Export Year 2008 (Country/Area)

Percent (%) of Total Export





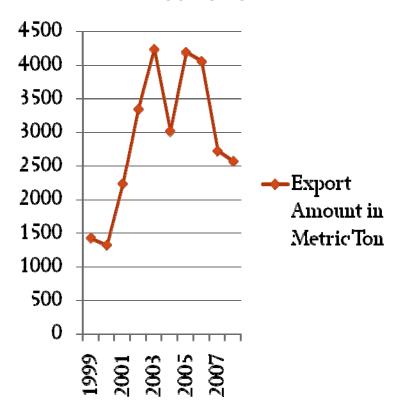
Chinese Chili Export (First 10 months of 2009)

Percent (%) of Total Export



Chinese Star Anise Export

Export Amount in Metric Ton



Year	MT	1000s US\$	US\$ /MT
1999	1424	1760	1236
2000	1318	2964	2249
2001	2225	6000	2697
2002	3339	7094	2125
2003	4232	6062	1432
2004	3010	4355	1447
2005	4180	6241	1493
2006	4052	5343	1319
2007	2719	4333	1594
2008	2563	4585	1789

Lessons Learned

- Food ingredient supply is very much weather-dependent. Price fluctuates accordingly.
- Food ingredient production in Asia is always labor-intensive.
- It is a good idea to have alternate suppliers in the same country and in different countries.

Lessons Learned (continued)

- Corporate culture between East & West is very different. It pays to learn.
- European companies in general deal better than American companies with Asia.
- All bucks stop at China. Vast territory, low labor costs, and relatively stable politics allow China to remain a long-term supplier of agricultural & horticultural products.

Opportunities

- Although Chinese agricultural policy emphasizes the need to feed the population, acreage for grain production has been decreasing consistently.
- Farmers are turning to horticultural crops, such as fruit, vegetables, and spice for better returns. Availability of certain spice crops is increasing significantly.
- Internal competition for market share among provinces or among the counties within the same province will keep the price in check.

Opportunities (continued)

- The Chinese government invests heavily in infrastructure. Boats on waterways, trucks, and railroads have reached almost every corner of the country. Interstate (province) shipment is no longer a strategic hindrance.
- The vast territory of the western frontier remains to be developed. The Xinjiang province has an agricultural potential that can rival California's. Sourcing activities should not focus only on the eastern coast or the southern provinces.
- The Xinjiang province is the gateway to many ex-Soviet satellite states.

Opportunities (continued)

- Chinese domestic demand for spice, spice extract, and essential oils is increasing rapidly. The time is right for American companies to establish businesses there.
- The Chinese government provides incentives for new products and new technology. Farmers and processors are taking advantage of this policy.
- Since Chinese farmers and processors are invested in modern technology & equipment, good processors are not hard to find.

Risks

- There is no shortage of food laws and regulations in China. The problem is implementation. Active participation in production and quality control is needed.
- In addition to land, real estate, and precious metals, Chinese have started to speculate on agricultural commodities. Price fluctuation makes contractual agreements difficult to implement.

Risks (continued)

- Appreciation of Chinese currency (RMB) is expected. The question is when and by how much. The potential for changing rates makes costing very difficult.
- Bad publicity due to poor Chinese food safety records can create an unfair and unnecessary extra burden on an American importer.
- Small farms and fragmented supply chains make traceability studies difficult to conduct.

Risks (continued)

- High levels of lead and sulfites have been found in Chinese garlic products. Contamination with agricultural chemicals has also been reported.
- There is no DAL (defect action levels) counterpart in China. There is very little awareness of DAL requirements.

Managing Risks

- Individually or collectively deal with mid- to large size suppliers.
- Active involvement with operation and quality control. Third party certification is very helpful but not a replacement.
- Impose Western quality & safety standards.
- Make good use of Chinese networks/connections.
- Constantly look out for alternate suppliers.
- FDA has 3 offices in China and they are watching Chinese food safety issues very carefully. Use their information resources, if available.
- A good understanding of Chinese social & political structures helps to make job easier.