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Report Highlights:
China's pulse production is forecast at 5.2 MMT in MY 2009/10, a five-percent increase from the estimated 5.0 MMT in MY 2008/09 assuming normal weather conditions continue and kidney bean production rebounds. China's MY 2008/09 kidney bean production is expected to decline 10 percent due to acreage decline following lower prices in 2008. Kidney bean exports are forecast to increase five percent to 800,000 MT in MY 2009/10 in response to the expected global economy recovery. China's dry pea imports are also forecast to increase to 350,000 MT driven by the strong demand from domestic vermicelli and starch processing.

Production:
China's overall pulse production is forecast slightly up at 5.2 million metric tons (MMT) in marketing year (MY, September – August) 2009/10, a five-percent increase from the estimated 5.0 MMT in MY 2008/09 assuming normal weather conditions continue.[1]

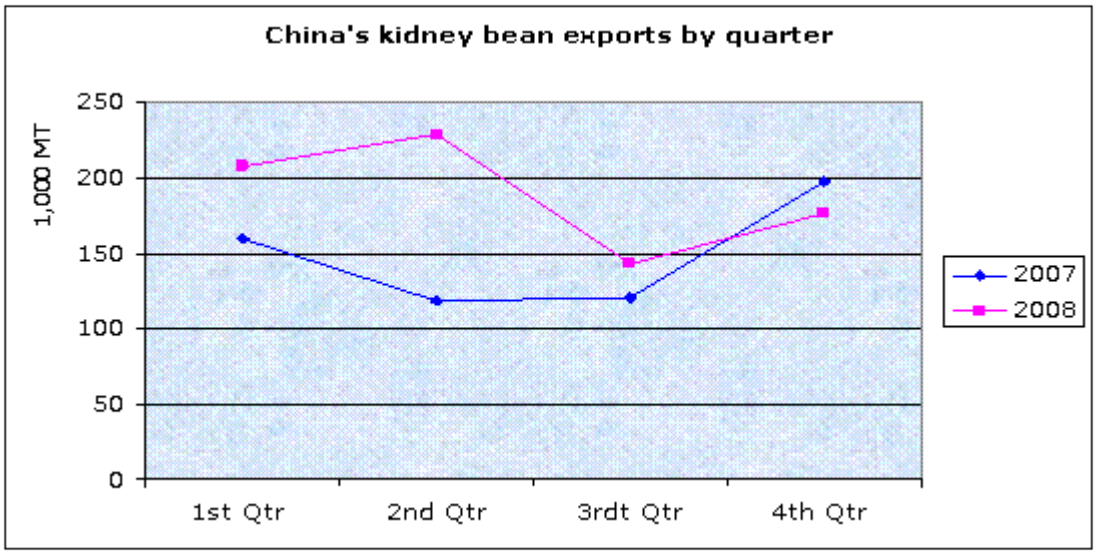
1) There are no official statistics on pulses in China, however, official data are collected on bean and soybean production. FAS/China uses the margin of these commodities as the pulse production. The industry estimates China's actual pulse production is larger than Ministry of Agriculture statistics, because a large amount of pulse producing land in western China is not included in official bean and soybean statistics.

Pulse production accounts for less than one percent of China's annual grain and feed output, and receives no production support from the central government. Pulse acreage is principally market driven and is therefore quite sensitive to market prices. Chinese farmers generally plant pulses on what would be considered "marginal land" in northeastern and western China. This so-called marginal land is not used for major crops such as corn, because weather conditions result in a shorter growing season and the area generally suffers from poor irrigation.

Kidney Bean Production Forecast to Rebound

Kidney beans account for over 70 percent of China's total pulse exports, although represent less than 20 percent of total production. Industry sources estimate China's kidney bean production at 850,000 MT in MY 2008/09, a decline of about 10 percent from the previous year due to unusually rainy weather in the Northeast (China's largest kidney bean producing area) from May through July and acreage decline in many provinces. Post intelligence indicates that planted area declined in every major producing province in 2009. In Heilongjiang Province, which accounts for 10 percent of China's total kidney bean acreage, the planted area dropped 20 percent. Industry attributes the acreage decline to the comparatively low bean prices in 2008.

The purchase price of kidney beans in 2008 reached historical lows, falling to $0.07/lbs (RMB1/kg). Farmers are unable to recover input costs when the purchase price falls below $0.25/lbs (RMB3.6/kg) and attributed the low sale prices to the global economic recession. Despite these lower prices, China's kidney bean exports in calendar year (CY) 2008 totaled 755,223 MT, a 26 percent increase over CY 2007. However, exports during the traditional peak season of the 4th quarter in CY 2008 declined (see figure below). The decline in 4th quarter sales caused processors to lower their offering prices to farmers during the harvest season, from October to December 2008. This in turn led to many of China's kidney bean farmers converting to other crops such as corn for 2009. Although pulses are planted on so-called marginal land and the yield for corn is not as high as in other areas of China, the return for farmers can be enough to encourage bean famers to switch crops. In 2008 for example, kidney bean yield was around 1,800kg/ha, and priced at $0.29/kg (RMB2/kg), making the return $522/ha; while the corn yield on marginal land was 3,000kg/ha (China's average corn yield is 5,200kg/ha) priced at $0.22/kg (RMB1.5/kg), the return was $660/kg. In addition, corn production receives $22/ha as a seed subsidy from the government, and requires fewer labor inputs than kidney beans.



Higher purchasing prices are expected during the 2009 harvest season as a result of shorter supplies compared to the previous year and the industry is expecting planting and production to rebound in MY 2009/10, driven by the strong export demand and low stocks. The major kidney bean producing provinces are Heilongjiang, Inner Mongolia, Xinjiang, Yunnan, and Guizhou. The average yield is around 1,800kg/ha in normal weather conditions.

Production of Broad Beans is Stable

Broad beans represent the largest share of China's total pulse production. Industry estimates MY 2008/09 production at 1.85 MMT, a slight increase over 2008. Sources revealed that China's broad bean acreage has expanded slowly but yields have fluctuated in recent years due to changes in weather conditions. The purchase price has increased slightly, but steadily, in response to the increasing demand from feed consumption. The majority of China's broad bean production is consumed domestically.

China's broad bean acreage is estimated at 900,000 hectares (ha) for 2009. Autumn broad beans (planted in autumn and harvested in summer) account for nearly 90 percent of total acreage in the major producing provinces of Yunnan, Guizhou, Sichuan, and Hubei Provinces. Spring broad beans (planted in the spring and harvested in autumn) account for the other 10 percent and are mainly produced in Gansu, Qinghai, and Ningxia Provinces.

Mung Bean Production Estimated to Decline

China's mung bean production is estimated at 850,000 MT in MY 2008/09. This represents a five-percent decrease from the 904,000 MT in MY 2007/08 as a result of acreage decline and unfavorable weather conditions. The expected production decline forced the purchase price upward. Local contacts reported that purchasing prices for newly harvested mung beans in Liaoning Province in September 2009 reached $940-970/MT, about 20 percent higher than the same period in 2008. According to MOA, China's mung bean acreage totaled 786,100 ha in 2008, with Inner Mongolia, Jilin, Anhui, and Henan Provinces accounting for over 60 percent of total acreage.

Adzuki Bean and Pea Production Stable
China's adzuki bean production is estimated at 320,000 MT in MY 2008/09, similar to the 314,000 MT in MY 2007/08. Industry sources indicated that adzuki bean production has been stable in recent years. According to MOA, China's adzuki bean acreage totaled 202,700 ha in 2008, with Heilongjiang, Inner Mongolia, Jilin, and Hebei Provinces accounting for 60 percent of total acreage. In most producing areas, adzuki is planted in May-June, and harvested in late September to early October.

China's dry pea production is estimated at 600,000 MT in MY 2008/09, and represents about 80 percent of China's total pea acreage. Green pea production accounts for the largest share of total dry pea production and is estimated at 400,000 MT in MY 2008/09, accounting for about 20 percent of total pea acreage. China's major dry pea producing provinces are Sichuan, Gansu, Yunnan, Shanxi, and Ningxia Provinces; while Yunnan, Zhejiang, and Jiangsu are the major producers of green peas. Industry sources revealed that green pea production in the suburbs of large cities is expanding in response to consumer demand in larger cities and the cost associated with maintaining freshness during transport over long distances.

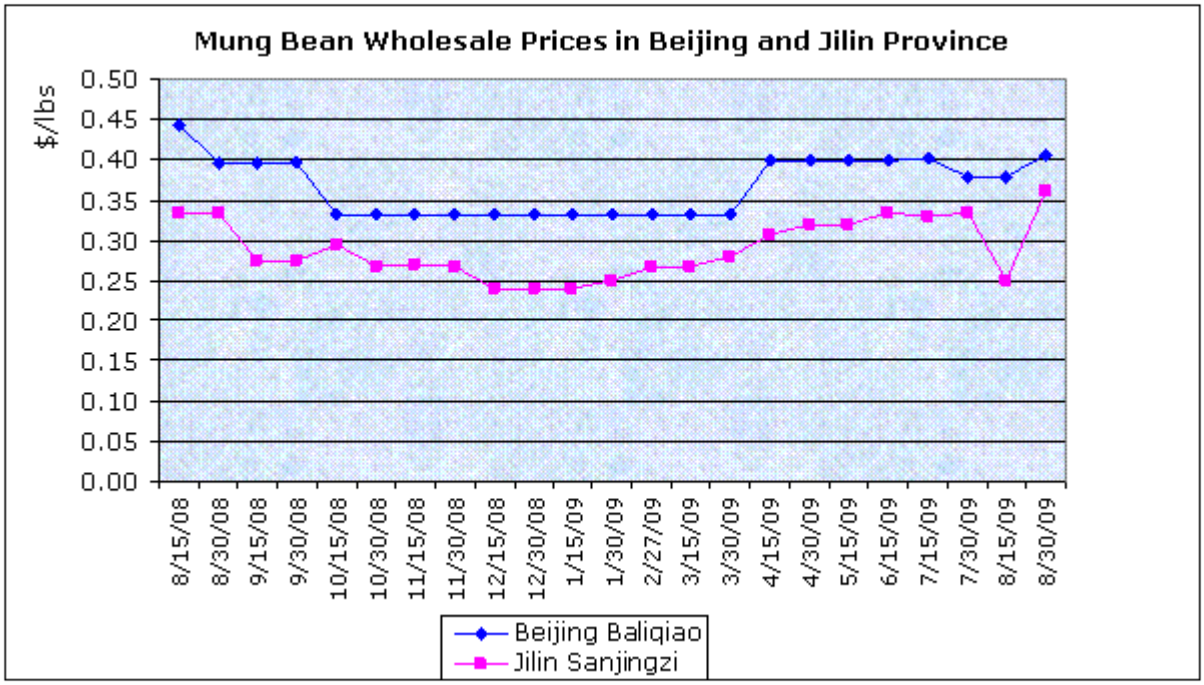
China's lentil production is estimated at 25,000-30,000 MT and acreage at 50,000-60,000 ha. Gansu is the largest lentil producing province in China, accounting for over 70 percent of total lentil acreage, followed by Shaanxi and Ningxia. Industry sources indicate that at 600kg/ha, China's lentil yield is low because older varieties are planted, field management techniques could be improved, and there is limited investment in research because overall annual production remains small compared with other crops.

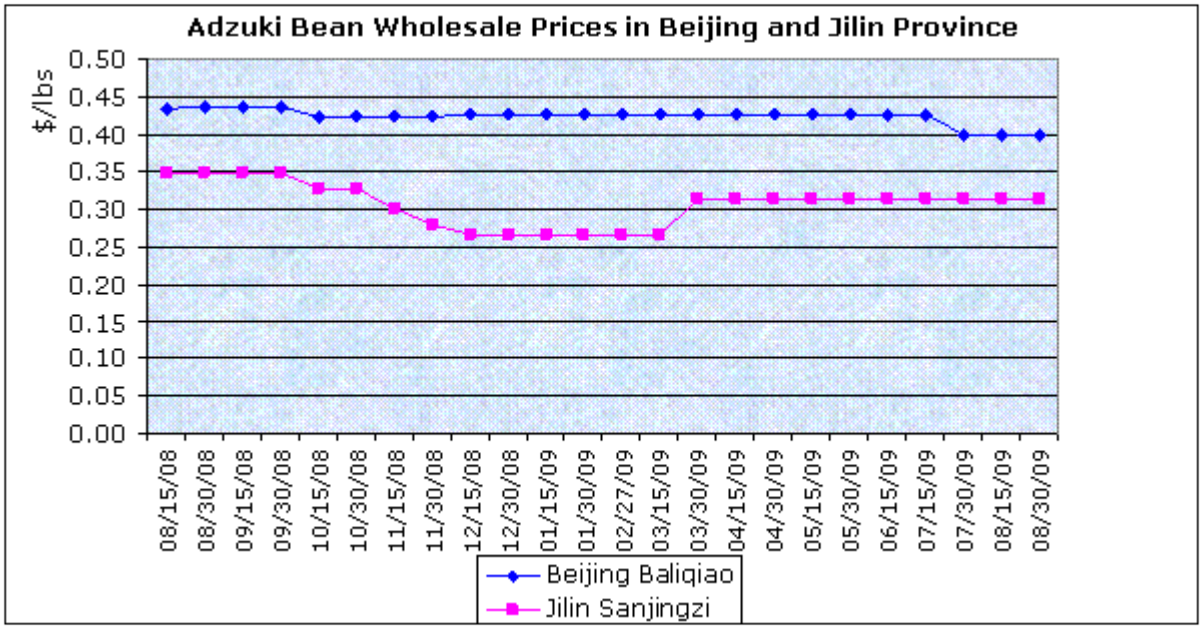
Consumption:
The majority of China's pulse production is consumed domestically, with the exception of kidney beans, which are generally exported.

Broad Beans
China's dry broad bean exports are very small compared to production. According to official customs statistics, China exported 43,718 MT of dry broad beans (H.S. code: 07135090), and 49,648 MT of canned/jarred broad beans (H.S. code: 20059920) in CY 2008. Industry sources indicated that over 50 percent of dry broad bean production is directly used for feed and an additional 30 percent is further processed for final use as feed. The demand from the feed sector is strong and increasing, buoyed by China's large livestock and poultry breeding sectors. In addition to feed, a large amount of dry broad beans are processed into snack food, vermicelli, starch, and spicy bean sauce/paste. Fresh broad beans are generally consumed as a seasonal vegetable in China, usually available from March to June. An industry survey revealed that consumers in South China tend to eat more fresh broad beans and peas than those in North China because of their diet preferences.

Mung and Adzuki Beans
Similar to broad beans, most of China's mung and adzuki bean production is consumed locally, with a small amount of mung beans being exported to neighboring Asian countries, including Japan. The consumption of these two beans is very similar in Japan and China. Most Chinese consumers believe the beans are healthful and traditionally prepared as an ingredient in congee and mixed with

rice and nuts. A large amount of adzuki beans are processed into bean paste, either for domestic pastry production or for export as an intermediate product. China's total bean paste production is estimated at over one MMT, adzuki accounts for about 50 percent of production, and mung beans account for 10 percent.





(Source: Ministry of Agriculture)

Kidney Beans

Kidney beans are the only pulse in China of which the majority is not consumed domestically. Over

80 percent of China's kidney bean production is exported, and traditionally kidney beans are not consumed fresh. The beans that remain in China are primarily processed into paste.

Industry sources assert that a large amount of Japanese bean paste production has moved to China to save on labor and other costs. Market intelligence indicates that Japanese consumers prefer paste produced from U.S. baby lima beans, rather than China's white kidney beans.

Dry Peas

About 80 percent of green pea production is consumed fresh domestically, and 20 percent goes to frozen processing in China. In major dry pea producing areas, locals consume dry peas as a grain. Domestically produced dry peas are usually used in starch processing, and imported dry peas are typically used in vermicelli production. The noodles, customarily made from mung beans, are popular in China. However, as mung bean prices have increased, producers have begun substituting comparatively cheaper imported peas for use in vermicelli production. In addition to their use in vermicelli production, imported dry peas are increasingly processed and used as a starch substitute, including in instant noodles and fillings in traditional foods such as moon cakes and dim sum.

Trade:

Kidney Bean Exports to Increase in MY 2009/10

Kidney beans (H.S. code: 071333) account for over 70 percent of China's total pulse exports. China's kidney bean exports are forecast at 800,000 MT in MY 2009/10, a five-percent increase from 760,000 MT in MY 2008/09 in response to the anticipated global economy recovery. Local traders told Post they decreased exports in CY 2008, although some contracted orders are still on the books, mostly with European buyers. Amid fears of banks going under and overall financial insecurity, exporters accepted payment in cash but in 2008 declined to accept letters of credit in order to minimize risk.

China's kidney bean exports totaled 755,229 MT in CY 2008, a 26 percent increase over CY 2007, a noted figure against the background of the global economic crisis. Brazil, historically one of the largest kidney bean producers in the world, suffered a major production decline in MY 2007/08. As a result, Brazil purchased a total of 100,610 MT in imports from China in CY 2008, in comparison to 550 MT in 2007.

New Selenium Standard will likely Facilitate China's Dry Pea Imports

Dry pea (H.S. code: 071310) imports in MY 2009/10 are expected to reach 350,000 MT, driven by strong demand from domestic vermicelli and starch processing. China imported 324,287 MT of dry peas in MY 2008/09, 84 percent of its total pulse imports (H.S. code: 0713). Canada is the major dry pea supplier to China, accounting for 99 percent of China's dry pea imports in MY 2008/09. The Chinese government is considering a revision of the national standard for selenium in dry peas. China's current standard considers selenium a contaminant, and the maximum level of selenium tolerated in cereals is 0.3mg/kg. Unofficial sources indicate that China is working on a new standard, which will consider selenium a nutrient, not a contaminant. As such, the MRLs for selenium together with zinc, copper and iron will be eliminated under the new standard. Sources unofficially report this revised standard will come into effect in 2010. Traders have indicated that although the new standard is not yet in place, selenium content has not recently been a trade concern.

Marketing:

Canada remains the largest exporter of dry peas to China in terms of both quantity and value. China's imports of lentils from the United States are mainly yellow peas. The table below shows the competitive situation of yellow peas. As an increasing number of U.S. pulse exporters have begun to look for opportunities in the China market, Japan has begun importing U.S. lima beans to make bean paste for confectionery products. Now with bean paste manufacturing shifting to China, the U.S. dry bean industry is looking for opportunities in China. The major competing products for U.S. beans are domestic beans from Yunnan and Northeast China and imported beans from Burma.

The major obstacle for U.S. dry beans in the Chinese market is price. U.S. beans are 50 percent higher on average than their competitors. However, as a representative from U.S. Dry Bean Council explained, U.S. dry beans - especially lima beans - enjoy better flavor and texture. These unique qualities make them popular in the Japanese paste market (processing now moving to China) even with the higher price. Also, moon cake (a traditional cake dessert eaten by Chinese families during the Moon Festival, an important holiday in China, see above photo) fillings are still the major use for middle to high quality bean paste products.

Summary of Competitive Situation Analysis for Yellow Peas

	U.S.	**Canada**	**China**
Supply	Large supply to meet Chinese importer/vermicelli producer demand	Supply similar to U.S.	Decreasing production resulting from incentives to produce grains, oilseeds, or return the land to forest
Product characteristic	High starch content, low elasticity	High starch content, low elasticity	Elasticity is better compared with imported products
Financing	D/P or L/C payment provide a kind of financing for Chinese importers	D/P or L/C payment provide a kind of financing for Chinese importers	Full amount pre-paid prior to delivery and often before planting
Shipping	Stable supply and delivery, exports from U.S. are increasing	Stable supply and delivery	Delivery time, quality, quantity unstable, but lower transportation costs

Marketing U.S. Peas: Superior Quality and More Consistency

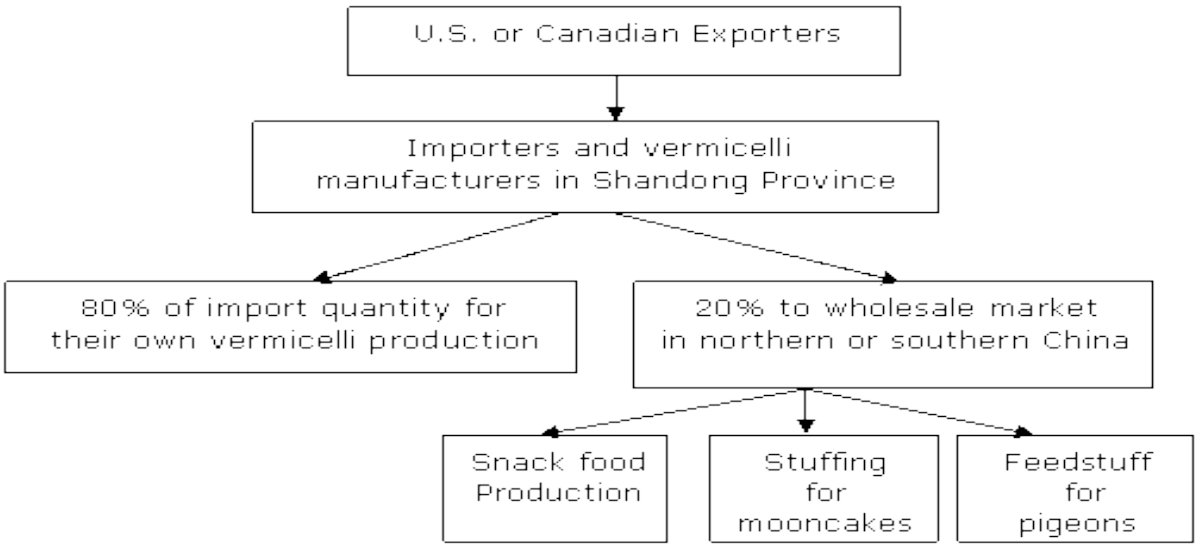
Most dry pea importers are located in Shandong Province and 80 percent of imports go to vermicelli production. Peak sales for vermicelli are from October to March to accommodate their use in traditional Chinese "hot pot," a common type of meal eaten during the colder months. Most of the

remaining 20 percent of imported peas are consumed in south China, where they are principally used for snack foods, such as moon cake fillings, or for use as pigeon feed.

Traders and processors using U.S. dry peas report they favor U.S. dry peas because of their consistent quality and reliable supply from U.S. exporters. Currently, all dry pea imports are containerized, but some traders are interested in Panamax cargo imports.

Canadian dry peas account for most of China's dry pea imports. However, there are opportunities to expand U.S. dry pea exports to China by educating Chinese vermicelli processors about the quality characteristics and availability of U.S. varieties. In addition to marketing activities to expand pea imports for vermicelli production from the United States, there are also market opportunities in higher-value product markets, including snack foods, moon cake filling, and bakery products. The following distribution channel can be used to maximize marketing opportunities.

Distribution Channel for Imported Peas:



With robust economic development and accelerating urbanization in China, bakery products are expected to post stable growth in the next few years, with a projected compound annual growth rate of six percent. Total bakery product sales are expected to reach over $14 billion (RMB 93 billion) by the end of 2010. Moon cakes make up 1/3 of bakery sales for most bakery chains in China. Bean paste manufacturers in China are constantly seeking new ingredients to add into their products to attract consumers. A manufacturer in Shanghai has already added chick peas into their products and so far has strong sales to high-end clients.

The Agricultural Trade Offices (ATOs) in China have worked with the U.S. Dry Pea and Lentil Council and several other cooperators to expand the use of U.S. products in the bakery industry, including featuring recipes with U.S. dry pea and lentil products. FAS/China will continue these cooperative market development efforts.

Production, Supply and Demand Data Statistics :

Table 1. China's pulse imports in Metric Tons

HTS#	Description	1st Qtr 08	2nd Qtr 08	3rd Qtr 08	4th Qtr 08	1st Qtr 09	2nd Qtr 09
071310	Peas	79,482	46,705	23,768	53,447	52,160	108,166
071390	Legumes	16,480	20,329	11,987	8,232	16,057	10,111
071340	Lentils	487	1,282	931	168	1,340	1,656
071331	Mung Beans	17,255	34,151	24,702	3,533	1,196	1,469
071333	Kidney Bean	924	1,093	5,030	338	776	1,152
071339	Beans, Other	19	23	2	0	47	6
071320	Chickpea	1	39	37	0	0	1
071350	Broad Bean	0	0	0	0	1	0
071332	Bean, adzuki	0	0	0	6		
0713	Pulse	114,648	103,621	66,457	65,725	71,577	122,562

Table 2. China's dry pea imports by country in Metric Tons

Country	1st Qtr 08	2nd Qtr 08	3rd Qtr 08	4th Qtr 08	1st Qtr 09	2nd Qtr 09
Canada	76,021	44,208	21,075	53,063	51,772	107,834
Australia	69	284	173	55	62	182
United Kingdom	150	256	457	241	302	110
United States	3,196	1,885	1,987	40	20	20
Taiwan	8	21	17	27	4	14
New Zealand	0	50	9	0	0	6
Others	38	1	52	22	0	0
Total	79,482	46,705	23,768	53,447	52,160	108,166

Table 3. China's pulse exports in Metric Tons

HTS#	Description	1st Qtr 08	2nd Qtr 08	3rd Qtr 08	4th Qtr 08	1st Qtr 09	2nd Qtr 09
071333	Bean, Kidney	207,518	228,643	143,230	175,838	241,560	200,622
071331	Mung beans	37,567	41,163	19,181	41,309	82,844	61,563
071332	Bean, Adzuki	16,469	14,834	9,797	9,493	14,461	13,642
071350	Broad Bean	16,380	15,067	7,900	4,378	7,184	6,050
071340	Lentils	5,371	4,373	3,336	4,885	3,236	5,285
071339	Bean, Other	2,954	2,927	1,303	7,379	8,151	5,043
071390	Legumes	2,316	1,840	595	760	1,636	1,131
071310	Peas	1,055	1,517	978	769	711	568
071320	Chickpea	112	0	3	0	0	0
0713	Pulse	289,741	310,365	186,323	244,810	359,782	293,904

Table 4. China's kidney bean exports by country in Metric Tons

Country	1st Qtr 08	2nd Qtr 08	3rd Qtr 08	4th Qtr 08	1st Qtr 09	2nd Qtr 09
India	16,055	5,645	4,111	12,977	16,973	28,729
South Africa	21,876	10,500	10,690	18,353	32,415	26,597
Turkey	28,383	9,149	625	4,717	13,201	25,001
Cuba	2,189	49,519	6,577	10,153	16,786	21,242
Venezuela	11,683	18,277	12,181	15,351	37,365	10,759
Italy	16,154	7,838	8,386	10,180	14,454	9,895
Pakistan	12,229	7,462	1,935	9,176	24,392	8,384
United Arab Emirates	4,409	10,197	1,618	6,181	3,662	4,909
Netherlands	625	1,587	381	1,484	2,009	4,198
Bulgaria	2,125	3,763	219	2,517	4,451	3,917
Yemen	3,782	5,299	747	4,294	9,012	3,585
Brazil	22,471	21,916	43,189	13,034	4,707	23
Others	65,536	77,492	52,569	67,420	62,132	53,385
Total	207,518	228,643	143,230	175,838	241560	200,622