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**Date:** 3/1/2010

**GAIN Report Number:** CH10008

## China - Peoples Republic of

### Grain and Feed Annual

#### Annual

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**Report Highlights:**

China's overall wheat, corn, and rice acreage increased slightly in MY 2009/10 over the previous year, the result of continued government support policies and procurement programs. In MY 2010/11, the combined planted area for wheat, corn, and rice is forecast to increase a mere one percent, buoyed by government support but hindered by continued decreasing arable land in China. Corn production in MY 2009/10 is estimated at 150 MMT, down three percent from the previous estimate and nine percent from MY 2008/09 production, as yields were adversely impacted by drought in China's northeastern provinces. Production in MY 2010/11 is expected to rebound nine percent to MY 2008/09 levels at 163 MMT, assuming an average yearly yield. Wheat production in MY 2009/10 is estimated at 106 MMT, down five percent from the previous estimate and six percent from the previous year due to unfavorable weather during the growth stage, while rice output in MY 2009/10 is estimated at 196 MMT, an increase of two percent over the previous year.

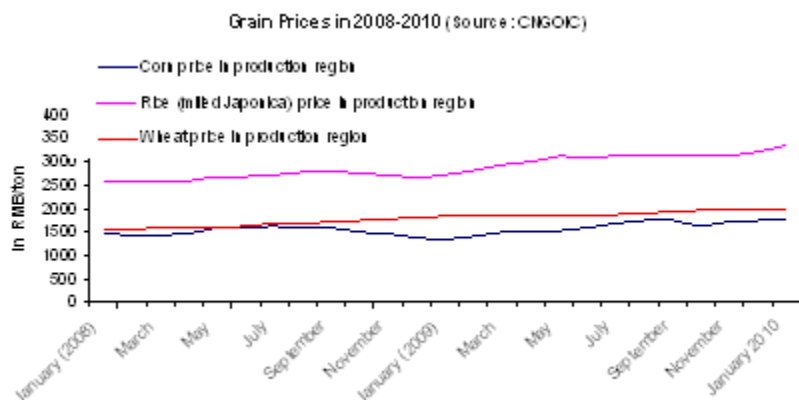
## Executive Summary:

China's wheat, corn, and rice acreage increased in MY 2009/10 over the previous year, the result of continued government support policies and procurement programs. In MY 2010/11, the planted area for wheat, corn, and rice is forecast to increase a mere one percent, buoyed by government support but hindered by continued decreasing arable land in China.

Corn production in MY 2009/10 is estimated at 150 MMT, down nine percent from the previous year, due to an estimated 11 percent drop in yields, which were adversely impacted by drought in China's northeastern provinces. Production in MY 2010/11 is expected to rebound nine percent to 163 MMT, assuming an average yearly yield of 5.3 ton/Ha. Wheat production in MY 2009/10 is estimated at 106 MMT, down six percent from the previous year due to unfavorable weather during the growth stage, while rice output in MY 2009/10 is estimated at 196 MMT, an increase of two percent over the previous year.

Post estimates for wheat and corn production, along with many trade sources, are lower than some preliminary official estimates. The difference may be attributed to a central government subsidy program that is based on grain production in each individual producing province. To gain more allocation of financial aid from the central government, provincial government authorities are occasionally tempted to overstate their grain output in a given year even if the crop was impacted by adverse weather.

China's grain stocks are estimated to remain at sufficient levels and the majority of the stocks are held in state silage, due to the massive government floor price procurement program. As the Government of China (GOC) places a premium priority on domestic grain security, the government has scaled down its incentive policies on exports of wheat, corn, and rice in MY 2009/10, to ensure "adequate" supplies.



In 2010, the GOC reiterated that it will retain its long-term self-sufficiency objectives and maintain a grain self sufficiency rate of above 95 percent through 2020. (China defines grains to include wheat, rice, corn, and tubers). Chinese leaders continue to reiterate that achieving grain self sufficiency for a population of 1.3 billion is a great contribution to global stability and food security. To meet the rising food demand from its large and growing population, the National Development and Reform Commission (NDRC) issued a detailed plan in November 2009 to raise the national grain production capacity by 50 MMT by 2020 (see GAIN CH10004 for more details). Also in December 2009, the annual Document No.1 was issued by the central government. As in previous Documents, the commitment of the GOC to expand investment, subsidies, and policy support to rural areas are highlighted, with priorities given to rural infrastructure construction projects, rural financial services and better public services for the rural population. Since 2004, Document No. 1 has focused on issues relevant to farmers, agriculture, and rural development. For the full text of Document No. 1 see GAIN CH10005.

Government support programs in MY 09/10 have functioned to stabilize price fluctuations for wheat, corn, and rice. However, this was achieved by artificially boosting domestic market prices, which sometimes rose higher than international prices. This gave a price advantage to imports of wheat and DDGS in MY 2009/10. The advantageous price

situation is expected to continue if the international market price falls in MY 2010/11.

In a landmark policy shift in 2009 the GOC approved two genetically engineered rice varieties and one genetically engineered corn variety for commercialization. However, there will be a lengthy process before China begins commercial sales of these new genetically engineered seeds. Some industry sources estimate that it will take two or more years for China to begin commercial production. While there has been heated media debate on the safety of genetically engineered crops among Chinese scientists since these approvals, according to state media the government will continue to push industrialization of genetically engineered crops on the basis of science. For more information on China's biotechnology policies and the recent approvals, please refer to GAIN CH 9060 and CH9061 in 2009.

## **Wheat**

### **Production**

Wheat production in MY 2009/10 is estimated at 106 MMT, down five percent from the previous estimate and six percent from the previous year due to lower yields resulting from crop damage by adverse weather during the growth stage. Wheat acreage in MY 2009/10 is estimated at 24 million ha, up two percent from the previous year due to government support programs for grain production (see Policy).

Planted area in MY 2010/11 is forecast up at 24.2 million ha, a one-percent increase from the previous year. Wheat production in MY 2010/11 is forecast to rebound to six percent to 112 MMT, six MMT above the MY 2009/10 estimate. This forecast assumes average annual yields. Winter wheat acreage accounted for 93 percent of China's total wheat acreage in MY 2009/10, with an estimated planted area of 22.4 million ha, two percent higher than the previous year.

Government support programs (see Policy section) encourage production of wheat and other grains (including corn and rice) and function to guarantee a reasonable profit margin for wheat growers. However, the small scale of the average farm means the income from grain production for an average rural household still falls far behind that from off-farm employment opportunities.

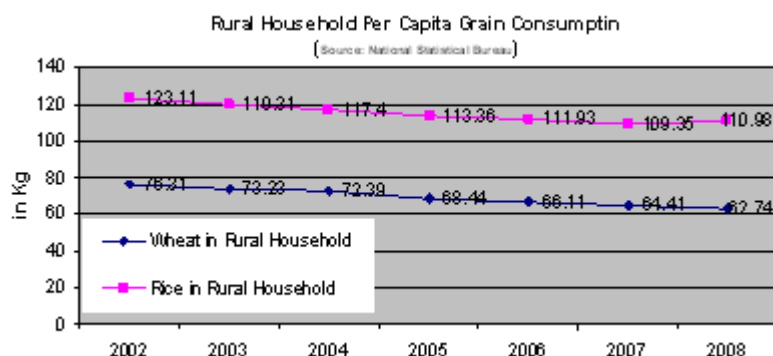
Henan Province produces about 26 percent of China's total wheat output. In 2009 the net profit for wheat production averaged about U.S.\$511/ha (or RMB231.8/mu), according to a survey by the provincial statistical bureau. However, the size of the average wheat farm in Henan is 0.35 Ha. So the mean net profit/household from wheat production was U.S.\$178.8 (U.S.\$511 X 0.35) in 2009. This is equivalent to a monthly salary for an average migrant worker in China. To make better use of the land, winter wheat in the northern China plain is usually double-cropped with corn. Compared with rice, corn, and winter rapeseed, wheat production utilizes a much higher rate of mechanized planting and harvesting. Wheat farmers favor this crop as it requires less labor input and field management compared with oilseeds, rice, rapeseed, and vegetables, and also allows farmers to seek off-farm employment opportunities in the cities.

As more of the rural population moves to urban areas for off-farm work opportunities, Post sees a trend of gradual land consolidation. In the long run this could allow for more mechanized farming, but this will be a long process due to the large size of the rural population in China and saturated population in the cities.

Post's estimate of wheat production is lower than some preliminary estimates by quasi-government agencies. Various trade sources report that China's production has dropped by 10-20 percent in parts of major wheat producing Anhui and Henan Provinces. During Post's September crop tour in Henan and southern Hebei, most farmers interviewed reported that the winter wheat crop in 2009 is lower than the previous year by varying degrees, but all attributed the drop to lower

yields. According to one trade source, four factors adversely impacted the winter wheat crop in 2009: winter drought, plant disease, hot and dry wind before harvest, and rain damage around harvest time.

The difference in estimates may be attributed to a central government subsidy program that is based on grain production in each individual producing province. To gain more allocation of financial aid from the central government, provincial government authorities are occasionally tempted to overstate their grain output in a given year even if the crop was impacted by adverse weather.



## Consumption

Overall wheat consumption in food products has been gradually declining. As incomes rise, consumers replace carbohydrates with protein. According to NSB data, per capita wheat consumption in both rural and urban areas has followed a gradual declining trend since 2002. In-home per capita consumption of wheat in rural households dropped to 62.74 kg/year in 2008 from 76.31 kg/year in 2002. NSB stopped releasing grain consumption data for urban households in 2009 without stated any reason, however, 2008 data showed a similar declining trend for grains in urban household. Post estimates this gradual decline will continue in coming years as per capita incomes rise and consumers purchase more animal proteins.

In recent years, consumer demand for traditional wheat products (Chinese steamed bread and noodles) declined while preference for convenience foods, including instant noodles, biscuits, and bakery products has increased. Unlike traditional homemade or home-style Chinese food products, these products require special wheat flour with specialized gluten content and consistency in quality. Domestic flour millers generally try to meet these requirements by blending imported wheat with lower-quality domestic wheat.

Millers report that because the current government floor price program aims mainly to boost overall wheat production, and offers no price premium on quality wheat, farmers favor wheat varieties with relatively high yield while overlooking quality improvements. Low-gluten-content wheat varieties for biscuit products offers a good example. Farmers tend to use more fertilizer than needed to boost yields. Consequently, the gluten level is high, often exceeding the mill requirements.

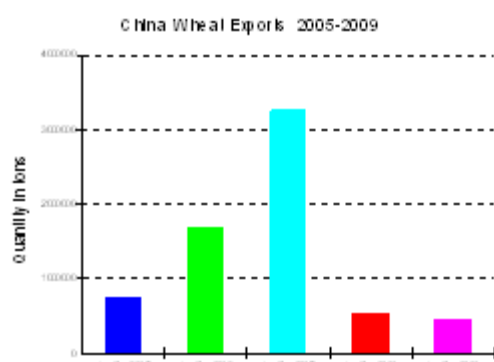
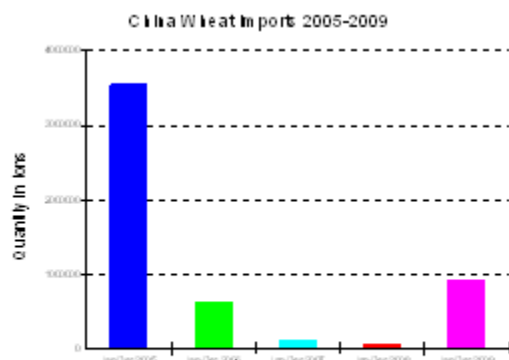
Due to the increase in production and floor price support artificially boosting the domestic wheat price, wheat imports sometimes become price competitive in affluent, coastal cities in southern China when international supply rebounds and the international freight rate falls. However, only the private sector took advantage of this price situation, with most of wheat imports in MY 2009/10 using private tariff rate quotas (TRQs).

Since China's WTO accession, wheat imports are managed by a TRQ system. State trading accounts for 90 percent of the total TRQ (9.6 MMT), and the remaining 10 percent is reserved for private sector holding. In MY 2009/10, flour millers purchased imported wheat at auctions held by SinoGrain, a state-owned grain reserve corporation, or its provincial counterparts. Imported wheat was purchased for state reserves by the central government from 2002-2004. Even after four or five years, wheat quality is still superior to that of domestic wheat, though it is generally stored for three or four years then auctioned in rotation. To meet a deadline of storage rotation, such imported wheat normally is auctioned at a discounted price, sometimes lower than the domestic wheat or the feed corn price in Guangdong, when corn supply generally becomes seasonally tight, as was the case in December 2009.

## **Trade**

Wheat imports for MY 2009/10 are estimated at 800,000 MT, 70 percent higher than the previous year, as the private sector continues to take advantage of the drop in international prices and pools their private TRQs for commercial variable shipments. Wheat imports in MY 2010/11 are forecast up at 900,000 MT in line with expected consistent mill demand for high quality wheat. All the imports are forecast to use private TRQs, as the state TRQs are held by the government, which normally functions to discourage any grain imports.

China's wheat exports in MY 2009/10 are estimated at 500,000 MT, up 32 percent compared to the previous year. Much of the increase is attributable to the establishment of China-ASEAN free trade zone, which partially contributes to Chinese wheat competitiveness in southeastern Asian markets. In the years prior to 2008, China's wheat exports averaged about 1.5 MMT annually. Since 2008, China's wheat exports have scaled down as the Chinese government discouraged export by removing the 13 percent VAT export rebate. MY 2010/11 exports are forecast at 800,000 MT. The increase in wheat stocks led the government to cancel a 3-percent duty on wheat exports in July 2009. However, to be competitive with international market prices, traders look forward to resumption of the VAT rebate for wheat exports. At least for the foreseeable future, it is unlikely the GOC will reinstate the VAT, unless there is a substantial grain surplus in China.



Source: World Trade Atlas

## Stocks

While official grain stock level estimates for wheat are not available, Post estimates ending stocks for MY 2009/10 and MY 2010/11 will be up three percent to 52.3 MMT and up eight percent to 60.6 MMT from the previous year as a result of forecast increase in wheat production in MY 2010/2011.

In October 2009, an announcement by NDRC highlighted that state reserves of grains held in government silage reached 225.4 MMT by the end of March, 2009. This is based on a five-month national survey. Unfortunately, there is no official breakdown of data by commodity, however, by Chinese government definition; grains held in reserve include wheat, corn, rice, and soybeans. According to the announcement, more than half of these stocks are from the 2008 harvest. Reserves are estimated to equal about 43 percent of China's total grain production in CY 2008. According to NDRC, as part of the overall economic stimulus package policy, the central government will invest in more silage construction and add an additional 15 MMT in storage capacity for grains by 2011. This massive and costly state-owned reserve highlights the government's belief that grain security is inextricably tied to economic development, social stability, and national security.

Though some liberal Chinese economists argue that China can achieve grain security and boost economic growth by increasing reliance on grain imports, the mainstream thinking by government economists continues to be that China should

achieve grain security domestically. International trade in grain is not viewed by the GOC as a secure source of supply given the size of the Chinese population and unpredictable price swings in international markets.

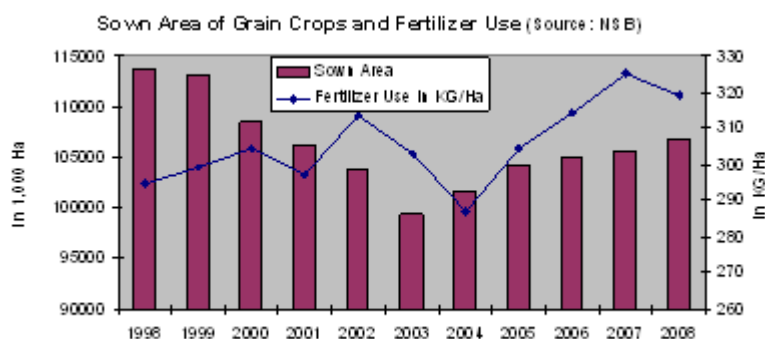
Generally, the government does not conduct a national survey on grain reserves. The most recent national survey on record for grain reserves was conducted in 2001.

## Corn

### Production

Corn production in MY 2009/10 is estimated to drop three percent from the previous estimate and nine percent from the previous year to 150 MMT. Though government agencies report a bumper corn harvest for the sixth consecutive year, Post's field observations in most of the major corn producing provinces in the northeast and the North China Plain revealed that corn yields were substantially impacted by adverse weather patterns such as prolonged drought during critical growth stages, or cold temperatures in July-August in some parts of the Northeast. In addition, this year saw a large spread of lodging in the North China Plain due to extreme winds just before harvest. The yield loss in each of these provinces varies, but is estimated at a range of 10-40 percent, based on Post observations and trader surveys. Corn acreage is estimated to rise two percent from the previous year to 30.4 million Ha as farmers shifted to corn from oilseeds, which were less profitable in MY 2008/09.

Similar to wheat, the central government's incentive program encourages much overstating of China's corn output, because it allocates financial support in accordance with the reported grain output reported in an individual province.



Corn production in MY 2010/11 is forecast at 163 MMT, 13 MMT higher than the previous year, assuming an average yearly yield. The corn area for MY 2010/11 is forecast to increase one percent over the previous year as farmers continue to shift to corn in response to higher returns. Official data shows that as China's grain acreage increases, fertilizer use (per ha) also has grown. Since 2004 there has been a noticeable increase in farmers' use of fertilizers to attain higher yields. (Note: the drop in fertilizer use in 2008 is attributable to the price rise for fertilizers.) In MY 2009/10, overall fertilizer prices have been lower than the previous year and the average fertilizer cost/Ha dropped by 10 percent from the previous year, according to Post surveys. For more information on China's overall fertilizer situation, please refer to GAIN CH 9082.

### Consumption

#### Feed Consumption

Post estimates feed corn consumption increased one percent in MY 2009/10 and will increase by another percentage point in MY 2010/11. Feed use is closely linked to changes in meat supply and demand, especially pork and poultry

production. The latest official estimates indicate that China's meat production in 2009 rose 5.0 percent from the previous year and swine inventory rose 1.5 percent over the previous year. In 2009, the swine sector recovered from previous year inventory losses due to animal disease outbreaks. Industry sources report a notable drop in mortality rate at swine farms in 2009 due to good disease control, and pork production rose close to six percent over the previous year. In MY 2009/10, the government subsidy on breeding stock production stimulated growth in this sector. Pork production accounts for over 60 percent of total meat production in China, while the remaining percentage is poultry, beef, and mutton.

Traditionally, swine and poultry farmers in northern and central China substitute wheat and early season rice into their feed mix. Particularly in Guangdong, a major producing pork and poultry province, locally produced wheat and low grade rice is a common substitute for corn. Industry sources report that feed rice consumption accounts for more than 10 percent of overall rice consumption in some rice producing provinces in southern China.

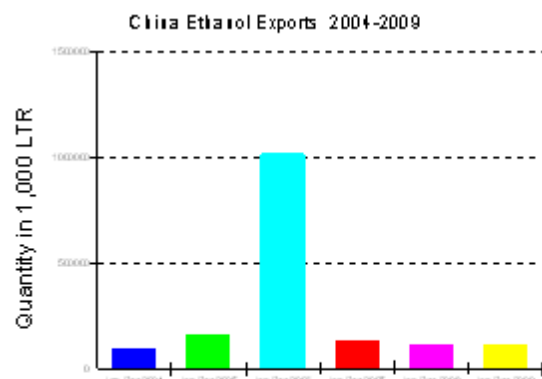
<b>China: Feed Production by Type (1,000 tons)</b>				
	<b>Total</b>	<b>Compound</b>	<b>Concentrate</b>	<b>Premix</b>
2005	107,000	77,610	24,980	4,780
2006	110,590	81,169	24,560	4,861
2007	123,310	93,189	24,912	5,209
2008	137,000	105,900	25,310	5,460
2009	140,000	106,960	27,080	5,950
Growth in 2009	2.40%	1.00%	7.00%	9.00%
Source: China Feed Industry Association				

There is no national tracking system for feed corn use, however MOA's China Industrial Feed Association tracks national industrial feed production. According to MOA data, feed production rose 2.4 percent in 2009 to 140 MMT from the previous year. Corn content is estimated somewhere between 55 and 65 percent of industrial compound feed. Industrial feed is estimated to be between 50 and 65 percent of total feed use. At the household farm level, farmers tend to purchase concentrate, and premix feed (essential nutrient-containing) exclusively, then blend with grains to reduce costs.

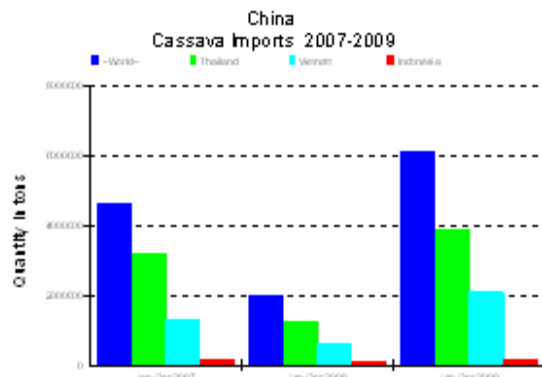
### **Industrial Use**

Industrial use of corn includes the production of starch sweetener, industrial and food starch, and ethanol. Post estimates corn consumption for all industrial uses totaled 41 MMT in MY 2009/10, up six percent from the previous year. The economic slowdown adversely impacted both domestic and overseas demand for starch, sweetener, and ethanol. China's starch and ethanol sectors had grown 10 percent in the last three years until mid 2008. To aid the sector's recovery and support exports, the government resumed the VAT rebate for starch and ethanol based on corn in June 2009. However, the new VAT rebate is only five percent, compared with the previous 13 percent prior to 2008.





Source: World Trade Atlas



Source: World Trade Atlas

High domestic corn prices made China's ethanol and corn starch exports in MY 2009/10 less competitive than previous years. In addition, the decline in international corn prices will further diminish the competitiveness of China's corn starch and other processed product exports in MY 2010/11.

China's starch and ethanol sectors use a wide range of feed stocks for production. While corn is currently the principal ingredient for these sectors, actual use depends on the relative costs of corn substitutes, which include wheat, rice, sweet potatoes, and cassava.

Imported cassava has been a price competitive ingredient for China's ethanol sector since 2003 when the tariff on dry cassava chips was eliminated in free trade agreements with Thailand and other ASEAN countries. Due to high domestic corn prices in MY 2009/10 and an overall GOC policy to avoid the use of food grains as a feedstock for ethanol production, imported cassava became much more price competitive and we saw a corresponding increase in imports. More cassava is

now being used for feed and ethanol production, and cassava imports increased a whopping 209 percent from the previous year.

<b>China's Cassava Imports in 1,000 Metric Tons 2005-2009</b>						
<b>(HS 071410)</b>	2005	2006	2007	2008	2009	%change
<b>Total Imports</b>	<b>3,335</b>	<b>4,950</b>	<b>4,625</b>	<b>1,976</b>	<b>6,107</b>	<b>209%</b>
Thailand	2,696	3,864	3,203	1,248	3,863	209%
Vietnam	412	941	1,279	611	2,092	242%
Indonesia	228	145	139	111	143	29%
Source: World Trade Atlas						

## Trade

Imports of corn are estimated at 150,000 MT in MY 2009/10. Nearly all corn imports are through border trade with neighboring ASEAN countries, and this is expected to remain unchanged in MY 2010/11. According to trade sources, the current landed price for imported U.S. corn in Guangdong ports is \$290/ton for shipments in March 2010, which is about \$8 higher than domestic corn. Before a substantial price difference appears for imported corn, the end users have the option to import feed wheat, DDGS, and cassava for feed use or ethanol production. Post forecast that no panamax shipments will be commercially viable for U.S corn exports to China in MY 2010/11, unless a substantial price difference appears between domestic and imported corn in 2010.

China's MY 2009/10 corn exports are estimated at 150,000 MT, while MY 2010/11 exports are forecast to increase to 200,000 MT. The government manages corn exports with tax incentives and export quotas. As the government continues to focus on ensuring domestic grain supply, no VAT rebate was offered in MY 2009/10. The declining global corn price also makes Chinese corn much less competitive with U.S. corn in the Asian market. The majority of China's corn exports are destined for South Korea, Japan, and Southeast Asian countries.

## Stocks

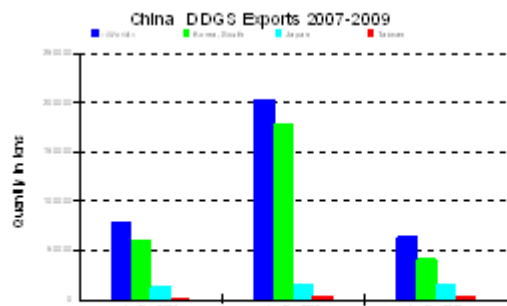
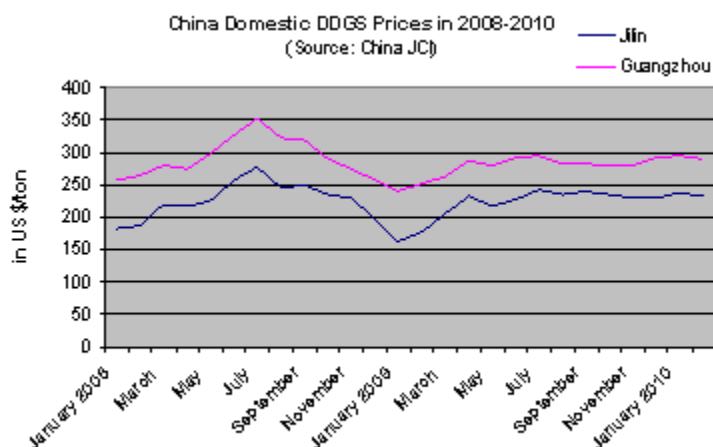
While official stock data is not available, Post estimates ending corn stocks for MY 2009/10 to be 52.7 MMT and forecasts ending stocks for MY 2010/11 to be 59.5 MMT, 7 MMT higher than the previous year, in tandem with the forecast increase in production.

Most corn stocks are held in the production provinces of Heilongjiang, Jilin, and Inner Mongolia in northeast China. Provincial governments pay storage fees, estimated at an annual cost of \$14.7 (RMB 100) per ton. To help market the corn produced in northeastern provinces, the government occasionally offers discounted rail rates for moving corn to the port of Dalian for shipment to Guangdong Province.

## DDGS

China currently produces a limited amount of ethanol from corn and has distillers dried grains with solubles (DDGS) as a by-product. Production is estimated at three MMT in MY 2009/10. As most ethanol plants are located in inland China, domestic DDGS sometime are not price competitive with imported DDGS in coastal provinces. In 2009, China's DDGS imports grew by almost ten times to 655,000 MT from 6,700 MT in 2008. Price increases for domestic corn and other feed ingredients such as soy meal, rapeseed meal, and cottonseed meal, encouraged more use of imported DDGS in the feed sector in Guangdong, Shandong, and Jiangsu Provinces. In addition to container shipments, MY 2009/10 brought the first

two panamax shipments into China. Industry sources continue to highlight that imported DDGS is of better and more consistent quality compared to domestically produced DDGS. The rise in trade is also attributed to the successful marketing and educational seminars arranged by the U.S. Grains Council.



Source: World Trade Atlas

In MY 2009/10, China's DDGS exports also fell substantially from the previous year, as high domestic corn prices cut DDGS's competitiveness in neighboring markets including South Korea, Japan and Taiwan.

DDGs – China - Imports in metric tons					
Country	2005	2006	2007	2008	2009
--World--	639	621	2,153	6,741	655,165
United States	0	0	101	6,007	651,703
DDGs - China - Exports					
Country	2005	2006	2007	2008	2009
--World--	32,211	39,838	79,108	203,826	64,215

Korea, South	21,542	19,416	59,234	178,511	41,379
Japan	9,156	19,181	13,076	15,757	16,197
Taiwan	145	143	684	3,980	2,865
Source: World Trade Atlas (HS:230330)					

### **Regulatory issues**

All non-grain or non-traditional feed and feed additives need to be registered with the Ministry of Agriculture. This definition is not described clearly by MOA, but appears to mean any feed except grains/oilseeds and their most basic/standard processed derivatives (e.g. corn/corn meal/starch). This process involves extensive submissions of information to MOA and the registration process can take a significant amount of time. Details on the feed registration process and history can be found in GAIN Reports CH6083, CH6084, CH6080, CH6099, CH6101, and CH6091.

Domestically produced DDGS is not recognized in MOA regulations in any feed component category and does not have a national quality standard. Imported DDGS have never been approved by MOA through its official feed registration process, though some facilities are currently making their way through the process. DDGS officially appears in AQSIQ feed quarantine standards (risk classifications) for the United States. At this time, USDA China recommends that companies adhere to quarantine requirements necessary to obtain quarantine import permits and strive to complete the MOA feed registration process. See GAIN Reports CH8012 and CH7015 for full discussion of the issue and the application procedure, and CH9021 for updates to the export certificate report.

## **Rice**

### **Production**

Total rice production is estimated at 196 MMT (unmilled) in MY 2009/10, up three percent from the previous estimate and two percent from the previous year, mainly attributed to record yields of early season Indica in southern China. Total estimated planted area is 29.5 million Ha, up one percent from the previous year and unchanged from the previous estimate. Early-season rice production is estimated at 33 MMT, 1.5 MMT higher than previous year. Because of favorable weather conditions, early season Indica rice yield reached a record high of 5.7 MT/Ha in MY 2009/10. Except for Heilongjiang Province, all major rice producing provinces reported an above average yield for late season Indica rice and Japonica rice. In Heilongjiang Province, the Japonica rice yield and quality was damaged by low temperatures and excessive rainfall in June and July.

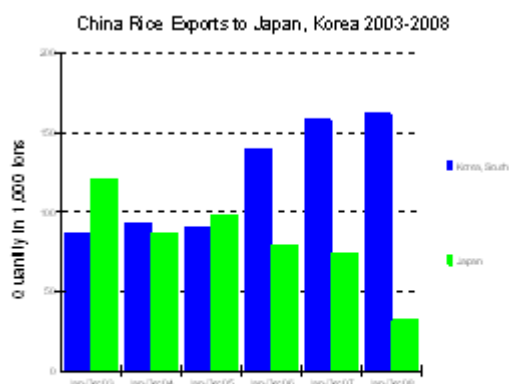
Rice production for MY 2010/11 is forecast at 197 MMT, up one percent from the previous year, assuming average yields. Acreage is forecast to rise one percent from the previous year. The central government's price support program (see Policy section) has guaranteed reasonable returns for rice farmers.

### **Consumption**

MY 2009/10 overall rice consumption is estimated at 134.5 MMT (milled), up three percent from the previous estimate and one percent from the previous year. For food consumption, traditionally, Indica rice is favored by consumers in southern China while Japonica rice is favored in northern China. As discussed in the wheat section, surveys show per capita in-house

grain consumption (including rice and wheat) declined gradually over the previous years and this trend is projected to continue.

In addition to food use (for human consumption), low quality early rice varieties and stale or rancid rice reserves are used to feed swine and poultry in both commercial farms and rural households. High corn prices in MY 2009/10 resulted in a greater proportion of both rice and wheat being used for animal feed use. While there is no reliable data on feed rice use, Post estimates that approximately 11 MMT of rice (unmilled) was used for feed in MY 2009/10.



Source: World Trade Atlas

## Trade

Rice imports in MY 2009/10 are estimated at 300,000 MT, and forecast to increase 10 percent to 330,000 MT in MY 2010/11. Most imports are Thai fragrant rice varieties, which are consumed in hotels or restaurants in more affluent coastal cities or by high income populations. Such imports are expected to continue to rise in tandem with increasing consumer incomes, making Thai rice more affordable. However, traditional dietary habits still persist in most of China and the average consumer still favors local rice varieties as a staple food.

Rice exports in MY 2009/10 are estimated at 850,000 MT, 8.5 percent higher than the previous year. China's exports of rice in MY 2010/11 are forecast to increase to 900,000 MT. The steady rise in exports could be attributed to improved management on rice quality at processing plants. Due to geographical proximity and Japanese rice processing investment in China, nearby Asian markets such as Japan and Korea favor China's Japonica rice varieties from the northeast. Prior to 2008, China exported low quality Indica rice to African countries and traders benefited from a 13 percent VAT export rebate. In 2008, the GOC removed the VAT rebate to discourage exports of rice and other grains. However, China continues to export a small but highly profitable volume of Japonica varieties to Japan and South Korea. Exports are subject to a quota levied by the importing country and no substantial increase is expected, but the current volume is forecast to continue over the next two years.

## Stocks

While official national reserve data are not available, Post estimates ending stocks for MY 2009/10 at 41 MMT (milled), and forecasts they will grow to 43 MMT in MY 2010/11, given the six most recent years of production increases.

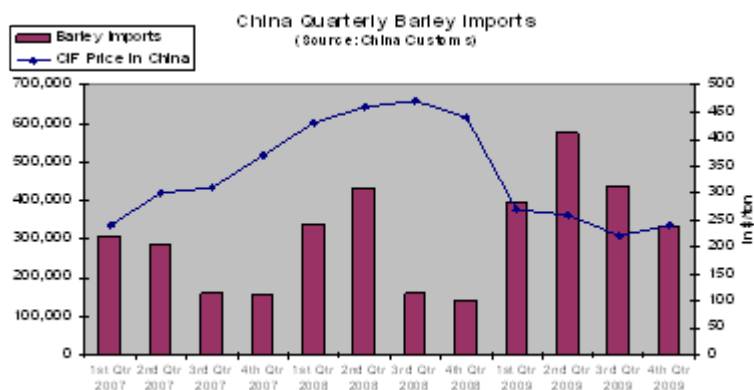
## Barley

Barley acreage in Inner Mongolia, Jiangsu, and Gansu, Provinces account for 50 percent of the national total. The MY 2009/10 barley planted area is estimated at 715,000 Ha, down 10 percent from the previous year, resulting from competition by winter wheat and winter rapeseed expansion. The government floor price program for wheat and rapeseed encourages farmers to plant these two crops at the expense of barley in Inner Mongolia, Gansu, and Xinjiang Provinces. Attributed to the decrease in acreage and drought conditions in Inner Mongolia and Gansu that negatively impacted yields, production is estimated at 2.5 MMT in MY 2009/10, down 12 percent from the previous year. MY 2010/11 will bring more of the same, and Post forecasts barley area will decrease another five percent to 680,000 Ha. Assuming average yields and current production management practices continue, production in MY 2010/11 is forecast to be unchanged at 2.5 MMT.



Barley in China is mostly used for brewing. China's beer production in CY 2009 is estimated at 42 million kilolitres, up seven percent over 2008. The sector's total demand for malting barley is estimated at around 4.5 MMT annually, and domestic barley production is not sufficient to supply the expanding industry. However, due to the high international barley price, China's MY 2009/10 imported barley is estimated at 1.6 MMT, just slightly higher than the previous year's 1.55 MMT. However, trade sources estimate that the rising international ocean freight rate may hurt the competitiveness of imported barley. Freight rate increases, coupled with the high international price of barley could make domestic feed-grade barley a lower cost alternative. As a result, barley imports in MY 2010/11 are forecast at 1.5 MMT.

To minimize the impact of an inadequate malting barley supply, brewers have reduced their dependence on malting barley with efforts on marketing beer with a lighter taste. Other ingredients including rice, wheat, and syrup are frequently used by the brewers in making novel brands they believe cater to young consumers' changing preferences.

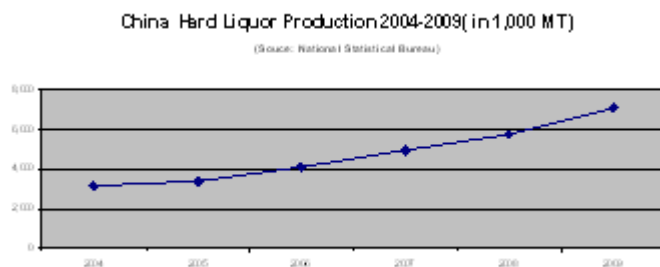


Over the previous years, the market for imported barley has been dominated by Australia, Canada and France. U.S. barley has been less price competitive compared with barley from these countries. The domestic brewers are not as familiar with U.S. barley, but are willing to tap into more supplying markets. Even though the current high price hinders import opportunities, it is worth exploring the possible demand for U.S. (6 rowed) barley in China.

Currently, neither MOA nor provincial authorities consider barley an important feed grain, and the crop receives no production assistance.

## Sorghum

Post estimates the sorghum planted area in MY 2009/10 is down five percent from the previous estimate and eight percent from the previous year at 450,000 Ha. Correspondingly, production is down 10 percent to 1.65 MMT due to the decrease in acreage and a lower yield damaged by drought. In MY 2010/11 sorghum planted area and production are both forecast to fall, by six and three percent, respectively. The forecast reduction in acreage reflects northeastern China farmers' response to government encouragement for grain production of corn and wheat. Sorghum is mostly planted on so-called marginal land with little or no irrigation.



The majority of China's sorghum, or approximately 1.5 MMT, is used to produce hard liquor. In 2009 hard liquor production in China is estimated at seven MMT in 2009, up 23 percent from over previous year. As consumer incomes continue to rise and the middle class continues to grow, hard liquor consumption is forecast to rise in tandem. Local governments at all levels also support hard liquor production facilities as their sales generate tax revenue locally.

Currently, neither MOA nor provincial authorities consider sorghum an important feed grain, and the crop receives no production assistance.

## Policy

Supporting the rural community and raising rural incomes have topped the government agenda for the last six years. Since 2004, the No. 1 Decree issued by the central government each year has focused on issues relevant to farmers, agriculture, and rural developments. In 2010, the GOC reiterated that it will retain its long-term self-sufficiency objectives and maintain a grain self sufficiency rate of above 95 percent through 2020. (China defines grains to include wheat, corn, rice, and tubers). Chinese leaders continue to reiterate that achieving grain self sufficiency for a population of 1.3 billion is a great contribution to global stability and food security.

To meet the rising food demand from its large and growing population, the National Development and Reform Commission (NDRC) issued a detailed plan in November 2009 to raise the national grain production capacity by 50 MMT by 2020 (see GAIN CH10004 for more details). Also in December 2009, the annual Document No.1 was issued by the central government. As in previous Documents, the commitment of the GOC to expand investment, subsidies, and policy support to rural areas are highlighted, with priorities given to rural infrastructure construction projects and rural financial services and better public service for the rural population. Since 2004, Document No. 1 has focused on issues relevant to farmers, agriculture, and rural development. For the full text of Document No. 1 see GAIN CH10005.

Following are government support programs that are relevant to grain production.

### Grain Production Support Program

Government Support Programs in 2006-2009 (in million \$)					
	Direct Payment	Seed Subsidy	Machinery Subsidy	Fuel/fertilizer Subsidy	Total
<b>2009</b>	<b>2,221</b>	<b>Na</b>	<b>1,471</b>	<b>10,529</b>	<b>18,088</b>
2008	2,221	1,775	588	9,382	15,126
2007	2,221	979	294	4,059	7,553
2006	2,088	603	88	1,838	4,618
2005	1,941	574	44	0	2,559
Note: In 2007 and 2008 seed subsidy covers soy bean, rice, wheat, corn, rapeseed and cotton. In 2009, the seed subsidy extends to potatoes. In 2010, it extends to hullless barley, and peanuts on a trial basis. Exchange rate: 1\$=6.8 RMB					

### Subsidy and Farmer Income

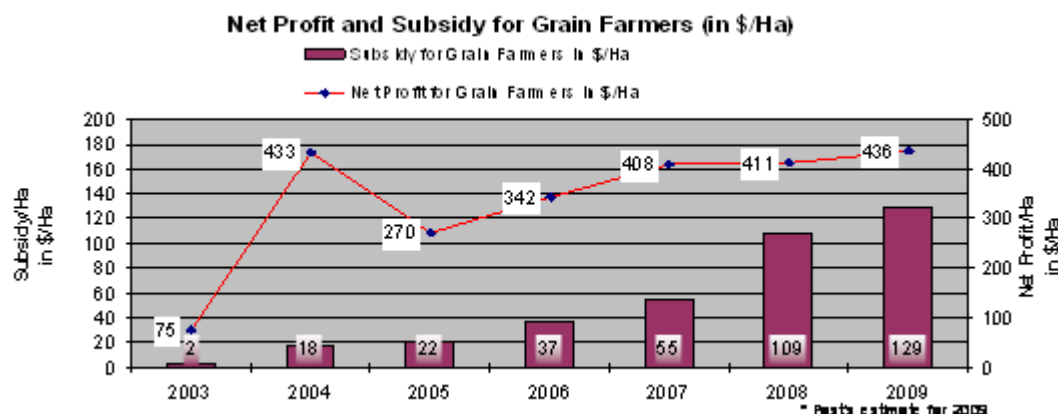
To encourage grain production and maintain profit margins for grain farmers, China implemented a series of policies, effective since 2004, including the elimination of taxes on agricultural land, direct payments to grain farmers, adjustments to price support programs, and in 2005, a subsidy for the purchase of farm machinery. In 2006, China added a direct subsidy for farm use of fuel and fertilizers. (For how these programs are implemented, see GAIN CH8012 Policy section)

Subsidy and Net Profit for Grain Farmers ( in \$/Ha)							
	2003	2004	2005	2006	2007	2008	2009*
Subsidy/Ha	2	18	22	37	55	109	129
Net Profit/Ha	75	433	270	342	408	411	436
Source: NDRC							

As in previous years, in MY 2009/10, the GOC expanded support programs and pledged to extend these existing programs into MY 2010/11, with more funds earmarked. The direct grain subsidy, seed subsidy, farm machinery subsidy, and



comprehensive subsidy totaled \$18.1 billion (RMB 123 billion) in 2009, about 20 percent higher than the previous year, according to state media. Post estimates that the aggregated subsidy of these programs on a per Ha basis rose 20 percent in 2009 over 2008, and accounted for about 30 percent of net profit margins for grain farmers in MY 2009/10. This increase of 3.5 percentage points over the previous year is based on an informal Post survey of grain farmers in northern China.

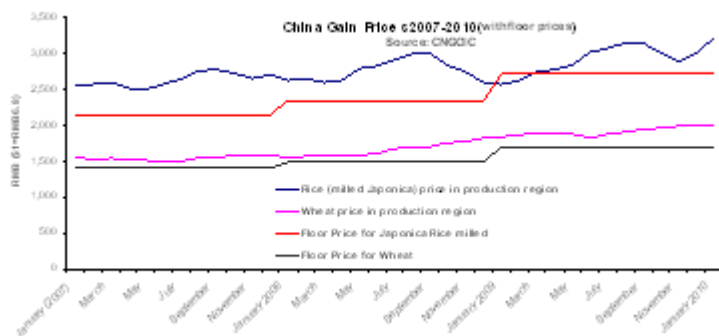


Government Floor Price for Grains in 2007-2010 (RMB/ton)						
	2007	2008	2009	2010	Growth	Purchase Period
<b>Rice</b>						
Early Indica (unmilled)	1,440	1,540	1,800	1,860	3.3%	July-Sept
Japonica (unmilled)	1,500	1,640	1,900	2,100	10.5%	Nov-Feb
<b>Wheat</b>						
White Wheat	1,440	1,540	1,740	1,800	3.4%	May- Sept
Red Wheat	1,380	1,440	1,660	1,720	3.6%	May- Sept
Wheat Average Floor Price	1,410	1,490	1,700	1,760	3.5%	
<b>Corn</b>						
Corn Average Floor Price	1,400	1,500	1,500			Dec-April

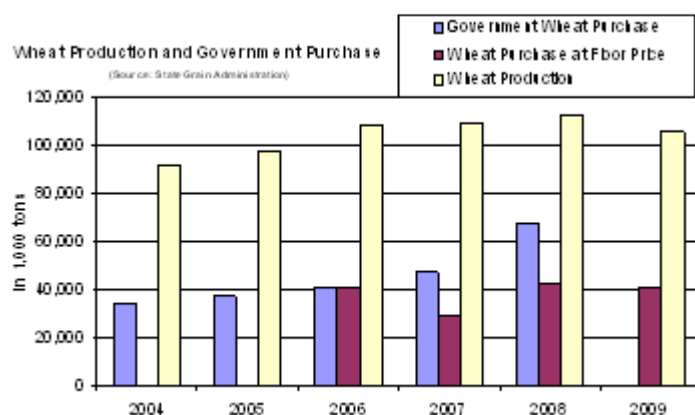
For grain production, Post estimates that the average net profit/Ha (wheat, corn, and rice) in 2009 will grow six percent over the previous year.

## Price Support Programs

### Grain Procurement Prices Increase

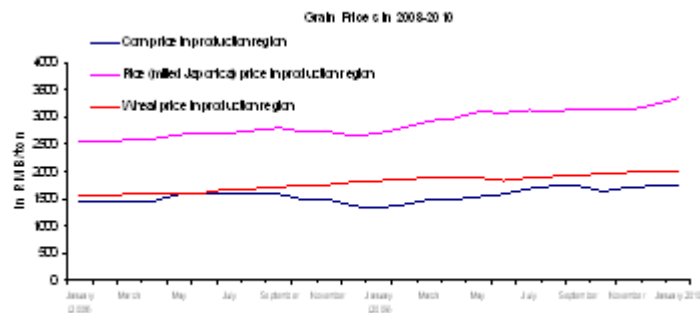


In 2009, the central government continued its price support program for major producers of wheat, corn, and rice. Provinces covered by the floor price program were Heilongjiang, Jilin, Liaoning, Inner Mongolia, Shandong, Hebei, Henan, Anhui, Jiangsu, Shanxi, Hunan, Hubei, and Jiangxi provinces. These 13 provinces are located in the grain-surplus regions that produce about 80 percent of nation's commercial grains to meet the demand in other grain-deficit provinces. In addition to these 13 provinces covered by the floor price program, in some other provinces, state media reported that the local government set a floor price for wheat to encourage the grain production locally in MY 2009/10.

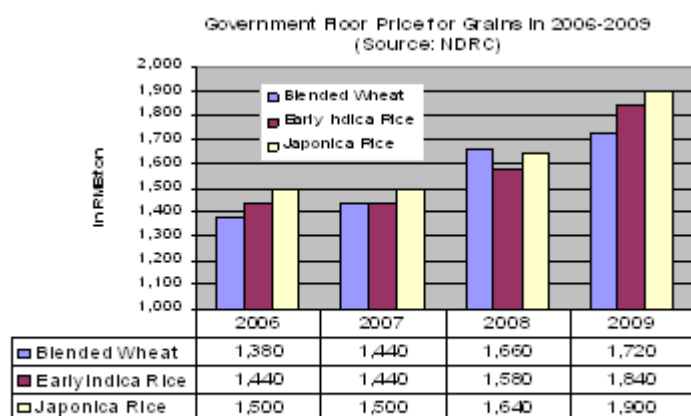


To maintain profit margins for grain farmers and offset the rise in input costs and off-farm employment opportunities, GOC has raised the floor price for both rice and wheat every year since the program started in 2004. The latest announcement in February by NDRC showed the floor price for Indica rice and Japonica rice will rise 3.3 percent and 10.5 percent respectively in MY 2010/11 from the previous year.

Average market prices for wheat, corn and rice in MY 2009/10, are up 9, 11, and 10 percent, respectively, over the previous year. Current market prices for wheat and rice are above the floor prices, the result of government purchase programs. Using wheat as an illustrative example, during the designated purchase period (normally in the months after harvest), the GOC designates grain storage companies to purchase wheat from farmers at a pre-set floor price. During the previous three years, the wheat procurement at floor price averaged about 37 percent of China's total wheat production.



For corn, the purchase program covers the northeastern provinces including Heilongjiang Inner Mongolia, Jilin, and Liaoning in MY 2009/10. In addition to the floor price of \$220.5/ton (or RMB 1,500/ton), the government encourages end-users (mainly feed mills) and state trade companies in southern China provinces to purchase corn from northeastern provinces. For purchases made from December 1, 2009 to April 30, 2010, government is offering a subsidy of \$10.3/ton (or RMB 70/ton) to traders or feed mills.



As it is intended to do, the floor price program in MY 2009/10 has functioned to stabilize price fluctuations for wheat, corn, and rice. However, market prices were artificially boosted, and sometimes grew higher than international prices. This gave price advantages to imports of wheat and DDGS in MY 2009/10. The situation is expected to repeat in MY 2010/11 as the government will continue to maintain its floor price, yet international grain prices fluctuate.

#### Tariff Rate Quotas

<b>2008 Grain Tariff Rate Quota (TRQ):</b>		
<b>Allocation (Metric Tons )</b>		
<b>Commodity</b>	<b>TRQ</b>	<b>State Enterprise Share</b>
<b>Wheat</b>	9,636,000	90%
<b>Corn</b>	7,200,000	60%
<b>Rice</b>	5,320,000	50%

Upon accession to the World Trade Organization (WTO), China established Tariff Rate Quotas (TRQs) for wheat, corn, rice, and several other commodities. These quotas reached final levels in 2004 and have remained unchanged since. The percentage of the quota reserved for non-state-owned enterprises is 10, 40, and 50 percent for wheat, corn, rice (short and long grain), respectively.

## Statistical Tables

### PSD tables

Table1. Wheat PSD Table

Wheat	2008			2009			2010	
	2008/2009			2009/2010			2010/2011	
	Market Year Begin: Jul 2008			Market Year Begin: Jul 2009			Market Year Begin: Jul 2010	
	USDA Official Data		New Post	USDA Official Data		New Post	USDA Official Data	Jan
			Data			Data		Data
Area Harvested	23,617	24,000	23,617	24,000	24,250	24,100		24,240
Beginning Stocks	38,963	39,435	38,963	48,685	49,635	49,021		52,321
Production	112,464	113,000	112,464	114,500	109,000	106,000		112,000
MY Imports	481	100	473	600	150	800		900
TY Imports	481	100	473	600	150	800		900
TY Imp. from U.S.	209	60	146	0	60	350		400
Total Supply	151,908	152,535	151,900	163,785	158,785	155,821		165,221
MY Exports	723	400	379	1,000	1,000	500		800
TY Exports	723	400	379	1,000	1,000	500		800
Feed and Residual	5,000	5,000	5,000	5,000	4,000	6,000		7,000
FSI Consumption	97,500	97,500	97,500	97,000	97,000	97,000		96,800
Total Consumption	102,500	102,500	102,500	102,000	101,000	103,000		103,800
Ending Stocks	48,685	49,635	49,021	60,785	56,785	52,321		60,621
Total Distribution	151,908	152,535	151,900	163,785	158,785	155,821		165,221
Yield	5.	5.	4.762	5.	4.	4.3983		4.6205

Table2 . Corn PSD Table

Corn	China	2008			2009			2010	
		2008/2009			2009/2010			2010/2011	
		Market Year Begin: Oct 2008			Market Year Begin: Oct 2009			Market Year Begin: Oct 2010	
		USDA Official Data		New Post	USDA Official Data		New Post	USDA Official Data	Jan
				Data			Data		Data
Area Harvested		29,864	28,200	29,864	30,000		30,460		30,700
Beginning Stocks		39,394	36,782	39,394	53,169		55,679		52,679
Production		165,900	142,000	165,910	155,000		150,000		163,000
MY Imports		47	150	47	50		150		100
TY Imports		47	150	47	50		150		100
TY Imp. from U.S.		90	0	5	0		0		0
Total Supply		205,341	178,932	205,351	208,219		205,829		215,779
MY Exports		172	500	172	500		150		200
TY Exports		172	500	172	500		150		200
Feed and Residual		110,000	99,000	105,000	116,000		106,000		107,000
FSI Consumption		42,000	44,000	44,500	43,000		47,000		49,000
Total Consumption		152,000	143,000	149,500	159,000		153,000		156,000
Ending Stocks		53,169	35,432	55,679	48,719		52,679		59,579
Total Distribution		205,341	178,932	205,351	208,219		205,829		215,779

Table3 . Rice PSD Table

Milled  Rice, China	2008			2009			2010	
	2008/2009			2009/2010			2010/2011	
	Market Year Begin: Jan 2009			Market Year Begin: Jan 2010			Market Year Begin: Jan 2011	
	USDA Official Data		New Post	USDA Official Data		New Post	USDA Official Data	Jan
			Data			Data		Data
Area Harvested	29,240	29,200	29,241	29,680	29,500	29,500		29,800
Beginning Stocks	38,015	38,015	38,015	42,875	42,945	38,899		40,849
Milled Production	134,330	135,100	134,330	137,000	133,000	137,000		138,000
Rough Production	191,900	193,000	191,900	195,714	190,000	195,714		197,143
Milling Rate (.9999)	7,000	7,000	7,000	7,000	7,000	7,000		7,000
MY Imports	330	330	337	350	350	300		330
TY Imports	330	330	337	350	350	300		330
TY Imp. from U.S.	0	0	0	0	0	0		0
Total Supply	172,675	173,445	172,682	180,225	176,295	176,199		179,179
MY Exports	800	1,500	783	1,500	1,800	850		900
TY Exports	800	1,500	783	1,500	1,800	850		900
Consumption and Residual	129,000	129,000	133,000	133,500	130,000	134,500		135,500
Ending Stocks	42,875	42,945	38,899	45,225	44,495	40,849		42,779
Total Distribution	172,675	173,445	172,682	180,225	176,295	176,199		179,179

Table4 . Barley PSD Table

Barley	China	2008			2009			2010	
		2008/2009			2009/2010			2010/2011	
		Market Year Begin: Oct 2008			Market Year Begin: Oct 2009			Market Year Begin: Oct 2010	
		USDA Official Data		New Post	USDA Official Data		New Post	USDA Official Data	Jan
				Data			Data		Data
Area Harvested		830	890	794	800	712	715		680
Beginning Stocks		296	231	296	430	306	452		371
Production		2,900	3,300	2,823	3,100	2,600	2,484		2,500
MY Imports		1,551	1,000	1,550	1,500	1,400	1,600		1,500
TY Imports		1,551	1,000	1,550	1,500	1,400	1,600		1,500
TY Imp. from U.S.		0	0	0	0	0	0		0
Total Supply		4,747	4,531	4,669	5,030	4,306	4,536		4,371
MY Exports		17	25	17	20	20	15		20
TY Exports		17	25	17	20	20	15		20
Feed and Residual		400	400	400	300	200	250		200
FSI Consumption		3,900	3,800	3,800	4,200	3,900	3,900		4,000
Total Consumption		4,300	4,200	4,200	4,500	4,100	4,150		4,200
Ending Stocks		430	306	452	510	186	371		151
Total Distribution		4,747	4,531	4,669	5,030	4,306	4,536		4,371



**Table5. Sorghum PSD Table**

Sorghum	China	2008			2009			2010	
		2008/2009			2009/2010			2010/2011	
		Market Year Begin: Oct 2008			Market Year Begin: Oct 2009			Market Year Begin: Oct 2010	
		USDA Official Data		New Post	USDA Official Data		New Post	USDA Official Data	Jan
				Data			Data		Data
Area Harvested		450	450	490	427	427	450		420
Beginning Stocks		637	104	637	419	104	476		256
Production		1,800	1,800	1,837	1,700	1,700	1,650		1,600
MY Imports		14	10	14	15	15	20		40
TY Imports		14	10	14	15	15	15		40
TY Imp. from U.S.		9	0	0	0	0	0		0
Total Supply		2,451	1,914	2,488	2,134	1,819	2,146		1,896
MY Exports		32	80	32	50	90	40		30
TY Exports		32	80	32	50	90	40		30
Feed and Residual		100	80	80	50	50	50		40
FSI Consumption		1,900	1,650	1,900	1,800	1,600	1,800		1,700
Total Consumption		2,000	1,730	1,980	1,850	1,650	1,850		1,740
Ending Stocks		419	104	476	234	79	256		126
Total Distribution		2,451	1,914	2,488	2,134	1,819	2,146		1,896