Foreign Agricultural Service
GAIN Report
Global Agriculture Information Network

Scheduled Report - public distribution

Date: 3/9/1999

GAIN Report #CH9012

China, Peoples Republic of

Grain and Feed

Grain and Feed Annual Report

1999

U.S. Embassy
Approved by: Suzanne Hale
Drafted by: Lawrence D. Fuell/Alexander Kameny

Report Highlights:
China's grain production remains strong with estimated 1998 production of just under 490 MMT, including 110 MMT of wheat, 125 MMT of corn and 185 MMT of paddy rice. 1999 grain production is forecast to be nearly the same, with a little less wheat and a little more rice. The Chinese government continues to treat grain as a strategic commodity and operates an expensive and inefficient grain procurement, storage and marketing system. Imports are limited through non-transparent licensing requirements and tariff rate quotas, while the government subsidizes corn exports. Wheat and corn imports are forecast to increase in MY1999/2000.

Includes PSD changes: Yes
Includes Trade Matrix: No
Annual Report
Beijing [CH1], CH

Executive Summary

China appears to be awash in grain only months after it appeared to be simply awash, with images of flood waters crashing down the Yangtze River and spilling into fields and villages. Although detailed data are not yet available, the Chinese government has announced that grain production in 1998 exceeded 490 million MT. It never appeared that agriculture was in serious jeopardy from the floods. Post estimates that wheat production reached only 110 million MT in 1998, down from the year before (127 million MT) due to drought damage to the winter wheat crop. Rice production, the only grain truly affected by the floods, is estimated to have reached 185 million MT, also down from the year before. Of the three main cereal grains, only corn saw increased production in 1998. Production is expected to reach 125 million MT, almost as high as the record 1996 crop.

The Chinese government has announced a target of 490 million MT for grain production in 1999, about the same as 1998 production. The announcement explained that greater emphasis would be put on improving the quality of grain output next year rather than increasing quantity. With this year's winter wheat in trouble due to more bad weather (forecast to reach only 105 million MT), it will take good corn and rice crops to meet that target. Post forecasts corn at 123 million MT and rice at 195 million MT (paddy basis), both from slightly less planted area than in 1998.

China sees itself heading into the 21st century having defied critics who predicted that its grain production would be unable to keep up with growing demand. However, China's success in increasing its grain production has carried a heavy price. Even though the government has lowered grain procurement prices, the cost of domestic grain is currently around 30 percent over world market prices. The government recently reasserted its control over China's grain marketing system, in the name of reducing government costs (which were running at around $1.8 billion a month in 1998). The government continues to buy grain from farmers at above world market prices, which then piles up in inadequate storage, where it is managed by a bloated national grain bureaucracy and where as much as 20 percent of the grain is lost to pests and decay. In addition, the government is spending $30/MT to subsidize exports of corn.

For the foreseeable future, China will continue to export corn and rice and continue to limit grain imports with high tariffs, licensing requirements and phytosantiary restrictions–barring concessions made in the context of joining the WTO. The principal impediments to further corn exports, which exceeded 6 million MT in 1998, are government willingness to continue paying export subsidies which would need to increase as world market corn prices decline, and the ability to find customers in a markets that is currently flush with corn but short on cash. Corn imports in MY1999/2000 are forecast to be modest. China seems set on continuing to restrict wheat imports, but these are likely to grow to at least 4 million MT in MY1999/2000. Rice imports are expected to grow to 500,000 MT by 2000, with rice exports forecast to fall to 1 million MT in 1999 and 2000.

TOTAL GRAINS

Area and Procurement

Table 1. Grains Area and Production, 1996-1999 (million HA; million MT)

	1996		1997		1998		1999	
	Area	**Production**	**Area**	**Production**	**Area**	**Production**	**Area**	**Production**
CEREAL GRAINS a/								
Rice (paddy)	31.5	195.1	31.8	200.7	31.5	185.0	31.2	195.0
-- Early	8.3	44.0	8.2	45.8	8.1	40.0	8.0	44.0
-- Middle	14.1	99.4	14.7	105.0	15.0	100.0	15.2	106.0
-- Late	9.1	51.8	9.0	49.9	8.4	45.0	8.0	45.0
Wheat	29.6	110.6	30.1	123.3	30.4	110.0	30.2	105.0
--Winter	25.5	98.0	26.0	110.8	26.4	97.7	26.3	93.0
--Spring	4.1	12.5	4.1	12.5	4.0	12.3	3.9	12.0
Corn	24.5	127.4	23.8	104.3	24.3	125.0	24.0	123.0
Subtotal-Cereal Grains	**85.6**	**433.1**	**85.6**	**428.3**	**86.2**	**420.0**	**85.4**	**423.0**
MINOR GRAINS b/								
Sorghum	1.3	5.7	1.1	3.6	1.1	5.0	1.1	5.0
Millet	1.5	3.6	1.4	2.3	1.5	3.0	1.5	3.0
Other Grains 1/	3.9	8.9	3.8	9.2	3.9	9.0	3.9	9.0
of which Barley	1.0	3.5	1.0	3.5	1.0	3.5	1.0	3.5
Tubers 2/	9.8	35.4	9.8	31.9	9.7	34.5	9.7	34.5
Soybeans	7.5	13.2	8.3	14.7	8.2	13.9	8.0	14.0
Other Beans 3/	3.1	4.7	2.8	4.0	2.6	4.0	2.6	4.0
Subtotal-Minor Grns	**27.0**	**71.4**	**27.3**	**65.8**	**27.3**	**69.4**	**26.8**	**69.6**
TOTAL GRAINS	**112.6**	**504.5**	**112.9**	**494.2**	**113.2**	**489.4**	**112.2**	**492.6**

a/ State Statistical Bureau
b/ Ministry of Agriculture
1/ Includes barley, sticky millet, and buckwheat.
2/ Includes sweet potatoes and white potatoes,
with production on a dry grain basis (5:1).
3/ Includes mung, adzuki, kidney and broad beans.
Sources: 1995, 1996 - SSB; 1997 - SSB or MOA's statistical yearbook
Tuber production is estimate starting in 1996, when official
sources stopped publishing data except for white potatoes
(f:\shared\lotus\grnfd\totgrn, Sheet B)
Last update: 3/5/99

The Chinese government has announced that the 1998 harvest yielded more than 490 million MT of total grains, but provided no breakdown by type of grain (in China total grains includes rice, wheat, corn, soybeans, sorghum, barley , millet, tubers, edible beans, and other minor grains) or by province. The government has set a production target of the same magnitude for 1999, stressing that greater emphasis will be placed on varietal quality next year. Post's estimate of production of specific grains in 1998, which total just under 490 million MT, and our forecasts for 1999 grain production, are made, in part, against these parameters.

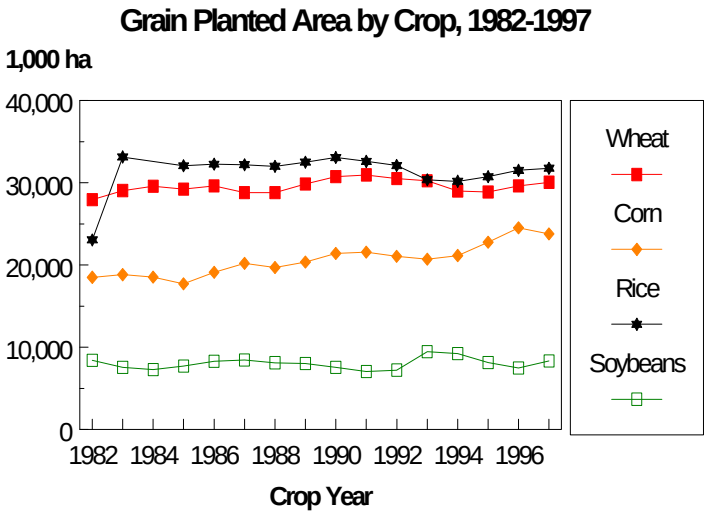
The State Statistical Bureau (SSB) publishes planted area and production data, broken down by province, for rice, wheat and corn, as well as for total beans (but no separate breakout for soybeans) and a combined category of minor grains to cover the rest. The Ministry of Agriculture, in its annual statistical yearbook, provides the same data plus more details on types of rice (early, middle and late), soybeans, and several minor grains. The official production area and volume data in this report are drawn from these two sources. Data have been published for 1997 production only recently. Data are not yet available for 1998.

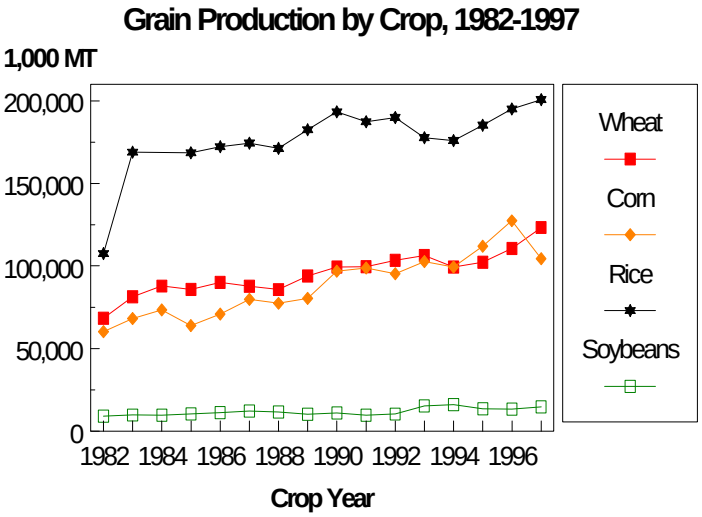
The size of China's grain planted area has remained steady over the past fifteen years while production has gradually increased. Two sets of graphs on the following page show trends in planted area and volume of production for rice, wheat, corn and soybeans (which the Chinese classify as a grain because its major use, until recently, was as tofu and other soy foods for human consumption) for all of China and for separate regions (planted area only), from 1982 to 1997.Chinese officials are quick to point to these kinds of data as evidence that Lester Brown, in his famous "Who Will Feed China?" book was wrong by suggesting that China's agricultural land area was in decline and that its yield growth would slow and be unable to keep up with growing demand. Rice, wheat and corn yields have all grown steadily, and at about the same annual rate, since the agricultural reforms that began in 1979. However, that "success" has come at a very high price in terms of the cost of maintaining government support for China's grain sector and, in terms of opportunities lost to increase production of crops where China enjoys a comparative advantage because of its low labor costs.

The second set of graphs show planted area trends in six of China's seven regions (the Northwest is excluded as its overall grain production is small), and the extent to which grain production is concentrated. Most of China's wheat production occurs in the northern region and corn production in the northeast and northern regions. Only rice production is relatively decentralized with significant production in four of the six regions reported. It is notable that the size of the rice production area has remained relatively constant in two regions--the east and south–despite urban encroachment on agricultural land over the past twenty years.

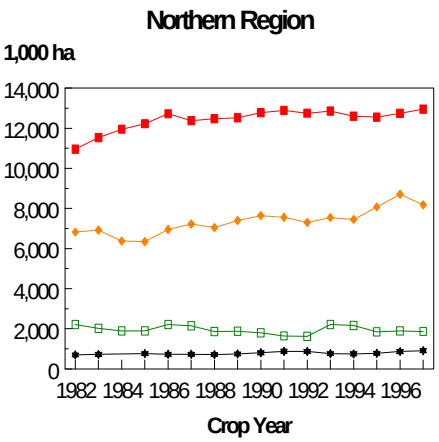
Post forecast a small reduction in area planted to grain back to the level it was in 1997, and small gains in yields are projected assuming that weather patterns are normal. Last year's grain reforms could result in slightly lower planted area, as farmers react to lower profits from growing grain by using fewer inputs and planting less grain. However, alternatives to growing grains are limited in most areas where it is grown. Further, the startup costs, in general, of switching to other crops are greater than reduced profits from growing grains. Finally, it appears that most farmers are finding ways around government restrictions on how they market their grains.

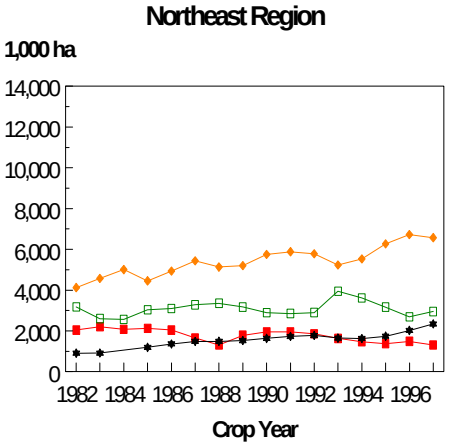
Graph 1. Grain Planted Area and Production in China, 1982-1997

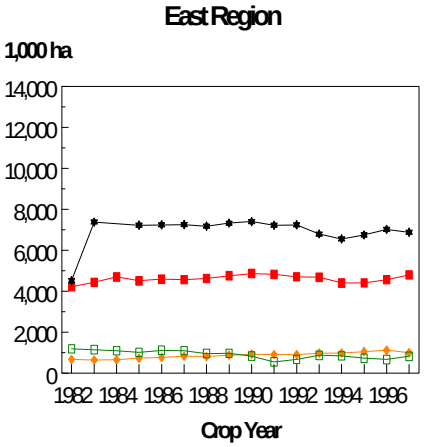


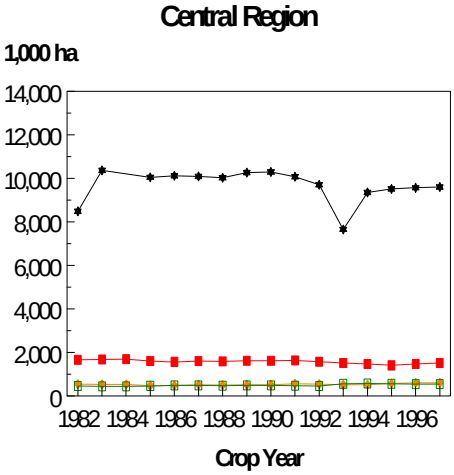


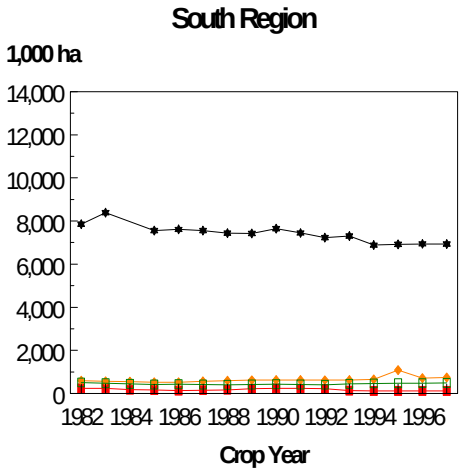
Graph 2. Grain Planted Area in Select Regions of China, 1982-1997

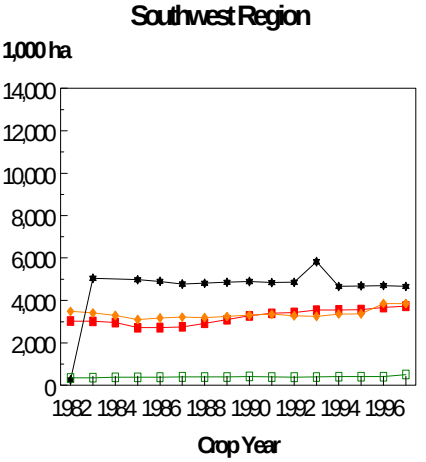








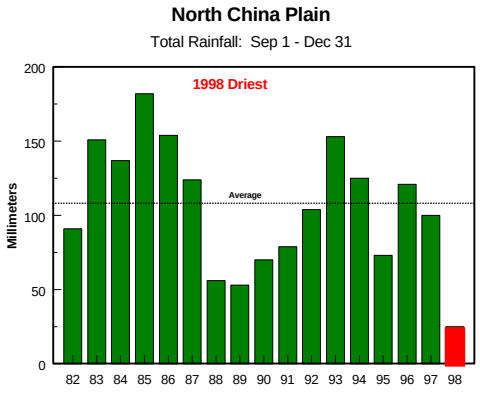




Weather

In spite of heavy flooding which produced sensational media images, weather in 1998 did not hurt the cereal grain production significantly. Summer grain production (90 percent winter wheat) was down from 1997, but due to dry conditions at the end of 1997 and irregular winter weather in early 1998, not summer floods. The fall 1998 harvest increased over the previous year, and most of that was due to improved corn yields, which were hurt by drought in 1997. Only rice (and cotton) production were directly affected by last year's flood. Drought, it seems, causes more widespread crop damage but less visually dramatic images.

Graph 3. Total Precipitation, China's Northern Plain, September-December, 1982-1998



The graph to the left highlights low moisture levels which could hurt yields in winter wheat which will be harvested from May. The small amount of precipitation received on the north plain, where 75 percent of China's wheat is grown, has been compounded by periods of warm weather since November 1998. The warm weather has had the affect of causing wheat in some areas to start growing prematurely, and increased the likelihood of disease problems. Post forecasts winter wheat yields will be down this year and that overall wheat production will reach only 105 million MT. Some two-thirds of China's wheat growing area is believed to be irrigated. However, a World Bank report estimates that only 30 percent of the water diverted into irrigation canals in actually delivered to crop root zones. If the spring rain begins in late March as usual, the affects of the drought could be mitigated somewhat.

Grain Policy Reforms

Last year the government began implementing a series of grain reforms, dubbed "the four separations and one improvement," aimed at strengthening State control over the national grain distribution system. The reforms do little to solve the country's fundamental agricultural problems of chronic overproduction and inefficient distribution. Nor are they likely to solve either the fiscal or management problems that plague China's grain bureau system, which last year lost an estimated $1.8 billion a month. The reforms appear to represent a major step back from opening China's internal grain procurement and distribution system to market reforms allowing competitive choices and freer prices. For a detailed description analysis of the reforms see CH8051.

Initial reports are that the government is having difficulties implementing the new system. Grain stations are reportedly sometimes unwilling to pay the full support prices and buy all the grain that farmers want to sell. Provincial level grain bureaus are delaying in implementing the reforms calling for segregation of state and commercial grain stocks, and separating public and commercial business. Grain stations continue to hold large grain stocks and the cost of managing these stocks continue to mount at the expense of the central government.

Provincial Grain Bureau officials with whom we spoke during the fall indicated that the amount of crop they planned to purchase from farmers would be about the same as the previous year. This does not square with the new policy. According to the new policy, which bars private traders from buying grain from farmers, the grain

bureaus should be buying more grain from farmers.

Most serious of all, perhaps, is the government's inability to stop private grain trading. In November the government issued regulations designed to force compliance with the new policy, in which it was decreed that:
* only state-owned grain firms can purchase wheat, corn and rice from farmers
* state grain firms must purchase as much grain as farmers wish to sell
* farmers are not permitted to sell grains directly to grain processors or to individual buyers
* purchasing grains requires a government license
* farmers are allowed to sell their surplus grains at county markets only in small quantities and only if they have a certificate giving them permission to do so
* railway, highway and waterway transport companies may not ship grains without proof that the shipper has the necessary legal papers to procure and ship grain
* unlicenced grain traders will be fined up to five times the value of the grain they bought

It is not clear what the long-term effects of the reforms will be. While grain prices in the second half of 1998 remained well below those of a year earlier (see wholesale price graphs below under Wheat, Corn and Rice), defenders of the new policy argue that these prices would have fallen further without the reforms.

Procurement

Procurement prices for cereal grains were reduced by about 5 percent in 1998, and we anticipate that both procurement prices and guaranteed purchase amounts will be reduced further in 1999, as the government tries to adjust excess stocks and reduce costs. Jiangsu Province, for example, announced that it plans to reduce by 1 million MT the amount of grain, mostly wheat, that it will buy from farmers at fixed quota prices in 1999. This does not mean they will buy less grain from farmers, only less at guaranteed prices.

In December of last year, the State Development and Planning Commission issued a circular urging local governments to implement "open-ended [grain] purchases" from farmers, meaning they were to procure as much grain as farmers wished to sell, provided the grain met purchasing standards. Local grain officials were directed not to arbitrarily down-grade grain in order to reduce prices paid to farmers or discourage them from selling their grain to the government. Local grain offices were also instructed to take effective measures to make it more convenient for farmers to sell their grain, such as purchasing grain on the farm, extending purchasing hours at the grain depots and speeding up the time needed for grading the grain.

In spite of edicts such as this, anecdotal evidence from around China indicates that the government faced serious problems again this past year procuring grains from farmers and that, in spite of the new policies, not all the grain farmers wished to sell was being bought. In Henan Province, for example, where officials have acknowledged severe shortages of both money to buy grains and space to store it, procurement of the new fall crop was 44 percent below that of a year ago as of the end of November 1998.

There were reports from local grain storage facilities last fall about how much storage capacity was being utilized for old grain, even before the new crop was procured. In Changchun, the capital of Jilin province (which produces 25 percent of China's corn), the city reported that 4 million MT of its 5 million MT of storage capacity was still occupied with old crop corn. In Liaoning Province, another major grain producing province in China's northeast, the story was the same. At the end of last year, farmers had 8 million MT of grains (mostly corn with some rice) to sell to the state, but the state already held 12 million MT of grain, 2 million MT

more than its storage capacity.

Stocks

The Chinese government continues to guard data on grain stocks, particular strategic reserves. From time to time government officials make statements about the size of China's grain reserves, but it is never clear if these figures include government, commercial and on-farm stocks. Nor is it clear if they represent ending stocks or if they include current production. Without such qualification, the utility of these announcements is marginal.

As part of the grain reforms announced last year, the government plans to separate China's strategic reserves from commercial reserves. When this happens, it should be easier to calculate and report the size of China's grain reserves. However, increasing transparency of the grain reserve system, at least to outsiders, probably was not a principal motivation for the reforms.

On-farm grain stocks are believed to have increased significantly since 1995. According to a study by unnamed government sources, the average grain stocks(no breakdown by specific grains) have increased 14 percent annually, with the greatest increase occurring between 1995 and 1996. Nationally, per capita on-farm stocks of food and feed grains in 1997 were estimated to be 329 kg, with stocks higher in the north (468 kg) than in the south (209 kg). These stocks are equivalent to 10 months of food grain consumption in the south (242 kg) and 24 months of food grain consumption in the north (232 kg). The study also reported that the amount of grains held increases as farmer income increases. However, as incomes move from "upper middle" to "upper" (no definition of these terms provided), the amount of grain farmers hold declines.

Although the study does not divide stocks between food grains and feed grains, it is likely that more of the stocks in the north are feed grains than food grains. Further, because weather conditions are not conducive to long-term storage and the interval between crops is shorter than in the north, it makes sense that farmers in the south hold small stocks, more of which are likely to be food grains (rice).

Grain Storage

Last fall the government announced that it plans to build additional grain storage facilities as part of its effort to ensure that the government will be able to purchase as much grains as farmers wish to sell. The government has provided little information on this new capacity, including costs and where it will be located. However, it is believed that most of the new capacity being built, or in some cases old capacity being restored, is for the State strategic reserve. Up until now, long-term strategic (food security) reserves have been commingled with short-term commercial reserves managed by the provincial and local grain bureaus. As part of the grain reforms, which call for separation of strategic from commercial grain stocks, special silos for the strategic reserve, to be controlled by the central government, are being added.

In January, the government announced plans to spend RMB18 billion (US$2.17 billion) to upgrade old silos and build new granaries, boosting grain storage capacity by 27.5 million MT by the summer of 1999, in time for the winter wheat harvest, but without specifying where that capacity would be located. In a separate announcement, reported by a grain sector news service, it was reported that work on 160 new or expanded grain depots is underway. The report identified 112 silos in nine provinces with a total capacity of over 12 million MT. These data are reported below.

PROVINCE	# DEPOTS	TOTAL CAPACITY (thousand MT)
Fujian	8	780
Henan	22	1,540
Shandong	14	2,900
Hunan	15	1,200
Henan	16	2,600
Anhu	11	1,200
Hubei	10	800
Shaanxi	10	575
Guizhou	6	650
TOTAL	112	12,245

Consumption

Estimating China's grain consumption is one of the more difficult tasks facing world grain analysts since the Chinese government provides little reliable consumption data. The State Statistical Bureau (SSB), in its annual compendium of economic data, estimates that grain consumption in rural households is 251 kg per capita annually. But this is not broken down by types of grains, nor is it divided between direct and indirect grain consumption. No data are published for urban areas, but it is believed that per capita grain consumption in China's cities is higher than in rural areas, and that more of that grain is consumed indirectly as meat, eggs and dairy products than in rural areas.

China's cereal grain consumption is believed to have slowed in 1998 along with the rest of China's economy. The Chinese government claims that the economy grew 7.8 percent in 1998, but most analysts believe the real growth rate was as little as half that amount. Meat consumption grew very little last year, which meant lower feed production and lower prices for both animals and meat. As a result of major economic reforms announced last year, people became more concerned about their economic well-being and began consuming less. The government recently set a target of 7 percent economic growth in 1999 which could support a modest increase in livestock production and demand for feed grains.

Trade

With last year's reforms China's leaders reaffirmed that grains are strategic commodities which, in their view, means that production, marketing and trade must be controlled. (By comparison, a very different set of procurement and marketing reforms were announced last year for cotton, which, it appears, is no longer considered a strategic commodity. For a discussion of those reforms, see CH8062.)

China maintains a tariff rate quota (TRQ) system for all grains, but does not publish specifics on either the quantity limits for in-quota tariff treatment or the procedures for administering the system. China's TRQ regime for bulk commodities is currently being addressed in the context of talks regarding China's accession to the WTO.

On the export side, China would like to continue exports of surplus grain, especially corn, to reduce stocks, strengthen internal prices and earn foreign exchange. Starting last year, when China exported over 6 million MT of corn (calendar year 1998), the government appeared to be following a strategy similar to that of Western countries in previous decades when surpluses were exported under concessional aid or subsidy programs. Unfortunately for China, it chose to adopt this strategy at a time when there were grain surpluses in the world. Thus, in order for China to export more corn, the government has had to lower the export price to be competitive with prevailing world prices. However, such action by the Chinese government would drive world corn prices down and make China's corn prices uncompetitive again. (A similar situation exists in the world cotton market thereby frustrating China's attempts to export surplus cotton.) If international prices had remained the same this year, lower procurement prices would have reduced the size of the subsidy needed to export corn at former world grain prices. However, the decline in procurement prices was more than offset by the reduction in world corn prices, increasing the size of the subsidy needed to compete internationally.

WHEAT

Table 2. Wheat PS&D Table, 1997-1999

WHEAT	MY1997/98		1998/99		MY1999/2000	
Market Year Begins	7/1997		7/1998		7/1999	
Crop Year	1997		1998		1999	
	Old	New	Old	New	Old	New
Area Harvested	30,040	30,357	29,740	30,400		30,200
Beginning Stocks	27,065	27,065	38,522	38,511		36,011
Production	123,300	123,289	110,000	110,000		105,000
TOTAL Mkt. Yr. Imports	2,157	2,157	2,500	2,500		4,000
Jul-Jun Imports	3,000	2,157	2,500	2,500		4,000
Jul-Jun Import U.S.	250	325	500	350		1,000
TOTAL SUPPLY	**152,522**	**152,511**	**151,022**	**151,011**	**0**	**145,011**
TOTAL Mkt. Yr. Exports	0	0	0	0		0
Jul-Jun Exports	0	0	0	0		0
Feed Dom. Consumption	6,000	6,000	6,000	6,000		8,000
TOTAL Dom. Consumption	114,000	114,000	115,000	115,000		116,000
Ending Stocks	38,522	38,511	36,022	36,011		29,011
TOTAL DISTRIBUTION	**152,522**	**152,511**	**151,022**	**151,011**	**0**	**145,011**

Area and Production

China's wheat production area is forecast to decline slightly to 30.2 million HA, with production fully to 105 million MT in 1999, to abnormally dry, warm weather. Official data on 1998 wheat production have not been released. Post estimates that 110 million MT of wheat were produced on 30.4 million HA. Data on wheat area and production in major provinces for 1996 and 1997 are provided in Table 3 below.

Severe dryness since last September, plus severe cold combined with brief periods of warm weather that have brought some wheat prematurely out of dormancy, have raised fears that winter kill will be a major problem for this year's winter wheat crop. Comparisons have been made to the 1976/77, when the wheat crop was severely affected by similar problems. In addition, warm weather has increased chances of wheat diseases in some regions.

Spring wheat, which accounts for around 15 percent of China's total wheat crop, is mainly grown in the northeast. It is of low quality and most of it or reportedly used for animal feed sold to the government which holds it in warehouses. In Heilongjiang, for example, which produces 25 percent of China's spring wheat, government stocks of wheat increased 77 percent between 1996 and 1998.

Table 3. Wheat Area, Production and Yields by Province, 1996 and 1997 (1,000 HA,;1,000 MT; MT/Ha)

PROVINCE	1996				1997			
	Area	Production	Yield	Share of Total Prod	Area	Production	Yield	Share of Total Prod
WINTER WHEAT								
Shandong	4,032	20,527	5092	18.6%	4,038	22,413	5551	18.2%
Henan	4,868	20,268	4164	18.3%	4,927	23,724	4815	19.2%
Jiangsu	2,216	10,143	4577	9.2%	2,341	10,647	4548	8.6%
Hebei	2,589	11,383	4397	10.3%	2,718	13,297	4892	10.8%
Anhui	2,066	7,483	3622	6.8%	2,138	9,412	4403	7.6%
Other Provinces	9,691	28,234	2913	25.5%	9,805	31,342	3197	25.4%
Subtotal	25,462	98,038	3850	88.7%	25,967	110,835	4268	89.9%
SUMMER WHEAT								
Heilongjiang	1,231	3,295	2677	3.0%	1,074	3,283	3057	2.7%
Nei Mongol	1,095	3,189	2912	2.9%	1,165	3,079	2643	2.5%
Gansu	625	2,101	3362	1.9%	594	1,979	3332	1.6%
Other Provinces	1,198	3,947	3295	3.6%	1,257	4,113	3272	3.3%
Subtotal	4,149	12,532	3020	11.3%	4,090	12,454	3045	10.1%
TOTAL WHEAT	**29,611**	**110,570**	**3734**		**30,057**	**123,289**	**4102**	
Sources: State Statistical Yearbook, 1997, 1998 (f:\shared\lotus\grnfd\whtprov.wk4)								

The central and regional governments are trying to address the wheat problem of poor quality in the northeast by introducing better winter wheat varieties similar to those grown in Canada. If this program fails, wheat will probably be replaced by other crops.

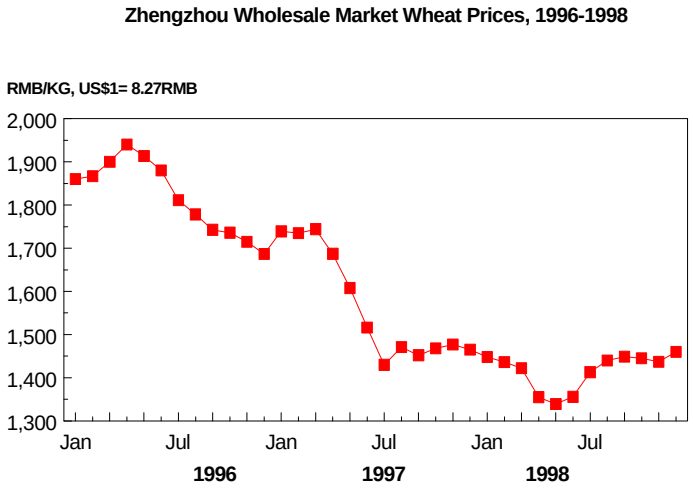
The Chinese government has reportedly set a goal of increasing high quality wheat production to 10 million MT annually by the year 2005. Industry experts estimate that each year China needs 3-5 million MT of hard wheat to produce bread and 7 million MT of high quality soft wheat to manufacture cakes and pastries. Most of this wheat has to be imported. However, Chinese scientists have developed scores of new varieties of high quality wheat to try to satisfy this demand from internal production. In addition, farmers are supposed to be paid a premium of US$12-17/MT for producing high quality wheat.

Procurement

Government procurement prices for wheat were reduced by about 4 percent last year to RMB1390-1410 (US$168-170) per MT from RMB1460-1520 (US$176-184). This reduction is not considered to be significant enough to result in a large shift from wheat to other grains (or out of grain production entirely). However, further reductions are expected in 1999. Of greater concern to farmers is the willingness of the grain depots to buy the wheat they wish to sell, at a fair grade, and with timely payment.

Wholesale Wheat Prices

Graph 4. Zhengzhou Wholesale Wheat Prices, 1996-1998



Treads in wholesale wheat price were similar to corn and rice prices in 1998. On the whole, prices remained below 1996 and 1997 levels. Prices reached their lowest point in May. Two factors that prompted price speculation and thus raised prices in the second half of the year were (1) reports of production and stock loses in July and August as a result of flooding, and (2) fear of government controls under the grain reforms.

Consumption

China's wheat consumption is no longer increasing, as today's more affluent consumers are consuming more fruit, vegetables and meat, rather than grains. Low quality wheat is fed to animals, especially in the north, and there are reports that this practice has expanded since the poor wheat crop in 1997. No data are published but it is believed that between 5 and 10 million MT of low quality wheat a year go to animal feed.

Trade

China's wheat imports are estimated to total 2.5 million MT in MY1998/99, compared to 2.2 million MT in MY1997/98. Given another poor wheat harvest in 1999, the Chinese government will be under great pressure from users to permit higher wheat imports in MY1999/2000.

Tariffs

China maintains a tariff rate quota (TRQ) system for wheat as well as other grains, but does not publish either the quantities for in-quota tariff treatment or the procedures for administering the system. China's TRQ regime for bulk commodities is currently being addressed in the context of talks regarding China's accession to the WTO.

Table 4. Tariff Rates for Wheat, Effective January 1, 1999

	Tariff No.	In Quota Duty	Out of Quota		
			MFN	General	VAT
Durum wheat	10011000	1.0%	114.0%	180.0%	13.0%
Wheat for seed	10019010	0.0%	114.0%	180.0%	13.0%
Other wheat	10019090	1.0%	114.0%	180.0%	13.0%
Wheat flour	11010000	6.0%	91.2%	130.0%	13.0%
Groats and meal of wheat	11031100	9.0%	91.2%	130.0%	13.0%
Pellets of wheat	11032100	35.0%	114.0%	180.0%	13.0%
f:\shared\lotus\grnfd\tarfsum.wk4					

CORN

Table 5. Corn PS&D Table, 1997-1999

CORN	MY1997/98		1998/99		MY1999/2000	
Market Year Begins	**10/1997**		**10/1998**		**10/1999**	
Crop Year	**1997**		**1998**		**1999**	
	Old	**New**	**Old**	**New**	**Old**	**New**
Area Harvested	23,500	23,775	24,000	24,300		24,000
Beginning Stocks	41,630	41,630	21,330	21,335		23,835
Production	104,300	104,309	120,000	125,000		123,000
TOTAL Mkt. Yr. Imports	200	119	3,000	500		500
Oct-Sep Imports	200	119	3,000	500		500
Oct-Sep Import U.S.	180	81	2,800	400		400
TOTAL SUPPLY	**146,130**	**146,058**	**144,330**	**146,835**	**0**	**147,335**
TOTAL Mkt. Yr. Exports	5,800	6,173	500	3,000		3,000
Oct-Sep Exports	5,800	6,173	500	3,000		3,000
Feed Dom. Consumption	91,000	91,000	94,000	92,000		93,000
TOTAL Dom. Consumption	119,000	118,550	122,000	120,000		122,000
Ending Stocks	21,330	21,335	21,830	23,835		22,335
TOTAL DISTRIBUTION	**146,130**	**146,058**	**144,330**	**146,835**	**0**	**147,335**

Production

China's corn production is forecast to be 123 million MT in 1999, down slightly from 1998. Area is expected to decline slightly due to farmer discontent with lower government procurement prices, a shift in emphasis from quantity to quality of production, and urban encroachment. However, farmers in principal corn growing regions (see table next page), particularly the northeast, do not have many alternatives to growing corn.

Support Prices

Official purchase prices for corn were reduced last fall compared to a year ago. Fixed and protected prices for 1997 and 1998 in nine key corn producing provinces are provided in Table 6 below. Of the two prices, the protected price is more important, as fixed price corn purchases from farmers account for less than 25 percent of the total quantity of corn purchased by the government. The average fixed price in these provinces declined 7 percent in 1998, and the average protected price fell 4 percent in these nine provinces.

Posted procurement prices assume a 14.5 percent moisture content and actual prices vary depending on moisture content. According to industry analysts, most corn in 1997 was purchased at a 28 percent moisture content compared to a 23 percent moisture content this year. Thus, on the one hand the prices farmers received were probably below that of the announced government support prices, but because of the lower moisture content of corn in 1998, farmers should have received a better price, on average, than they received the year before.

Table 6. Corn Area, Production and Yields by Province 1996 and 1997 (1,000 HA; 1,000 MT; Kg/Ha)

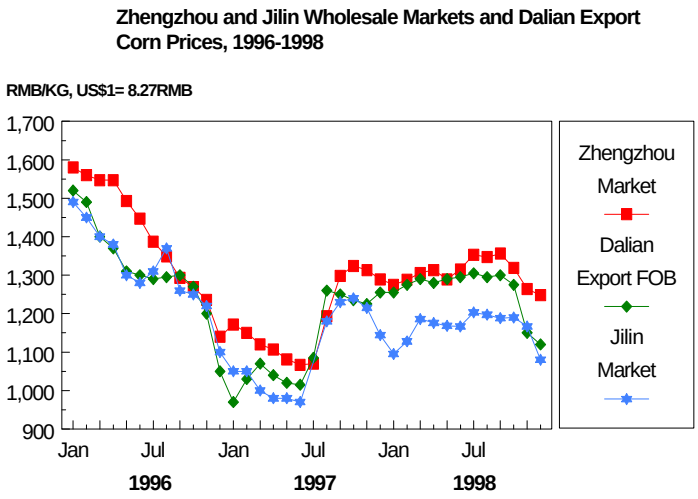
PROVINCE	1996				1997			
	Area	Prod	Yield	Share of Prod	Area	Prod	Yield	Share of Prod
Jilin	2,481	17,534	7067	16.9%	2,454	12,603	5135	12.1%
Heilongjiang	2,664	14,450	5424	13.9%	2,545	11,659	4581	11.2%
Shandong	2,827	16,034	5672	15.4%	2,627	11,060	4210	10.6%
Hebei	2,525	11,684	4627	11.2%	2,426	10,095	4161	9.7%
Henan	2,150	10,383	4829	10.0%	1,952	8,077	4137	7.8%
Liaoning	1,577	9,695	6148	9.3%	1,573	6,683	4247	6.4%
Other Provinces	10,274	47,691	4642	76.7%	10,198	44,132	4328	57.9%
TOTAL	24,498	127,471	5,203	100.0%	23,775	104,309	4,387	100.0%
Sources: State Statistical Year book. (f:\shared\lotus\grnfd\crnprov)								

Table 7. Procurement Prices for Corn in Major Producing Provinces, 1997 and 1998
(RMB/MT; RBM8.27 = US$1.00)

PROVINCE	1997			1998		
	1997	1998	Change	1997	1998	Change
Heilongjian	1,020	980	-3.9%	960	920	-4.2%
Jilin	1,040	1,000	-3.8%	960	920	-4.2%
Liaoning	1,040	1,000	-3.8%	960	920	-4.2%
Inner Mongolia	1,100	1,000	-9.1%	960	920	-4.2%
Hebei	1,260	1,220	-3.2%	1,120	1,080	-3.6%
Henan	1,280	1,220	-4.7%	1,120	1,080	-3.6%
Shandong	1,280	1,220	-4.7%	1,120	1,080	-3.6%
Shaanxi	1,280	1,060	-17.2%	1,060	1,060	0.0%
Xinjiang	1,160	1,020	-12.1%	960	900	-6.2%
f:\share\lotus\grnfd\corn\cornproc.wk4						

Wholesale Prices

Graph 5. Chinese Wholesale Corn Prices, 1996-1998



The graph on the left provides corn price data from three sources, two of them official wholesale market prices, and one a private industry source. Jilin prices reflect supply, Zhengzhou prices reflect demand, and Dalian prices can be thought of as a barometer of export expectations.

Prices held steady during most of 1998 but began to fall off in the fourth quarter, signaling growing domestic supplies, depressed demand for corn in the feed industry and declining expectations that China will embark on another corn export campaign in the near term.

Consumption

China's corn consumption in MY 1997/98 is estimated at 118 million MT, with modest growth forecast in MY 1998/99. Of total corn consumption, 75 percent is fed to animals, 6 million MT in used in alcohol production, 4 million MT is used in starch production, and 1 million MT is used for seed. However, without reliable production and stock information it is extremely difficult to judge the real consumption situation. While industry analysts agree on the proportions going to different uses, the estimates for total corn consumption vary by as much as 5 million MT up or down from this estimate.

Growth in corn consumption for feed is expected to remain virtually flat at 120 million MT in the current marketing year (MY1998/99) and it is forecast to grow very little in MT1999/2000. The main reason is slack demand for feed grains in China's livestock industry which remains depressed. In addition, excess supplies of substandard wheat and low quality early rice are believed to be replacing corn in feeding animals. Most analysts expect the livestock industry to improve (piglet prices were beginning to rise by the end of 1998) and along with it demand for corn. However, the poultry industry, which is far more dependent on export markets, is not expected to resume strong growth as long as the Asian financial crisis continues to affect other markets in the region.

We visited scores of feed mills in several regions of China in the past year. All of them spoke of demand for their products being down in 1998 from the previous year. Most blame it on the decline in the livestock and poultry sectors, which traditionally accounted for around 75 percent of China's corn consumption. Although official data on feed production in 1998 have not yet been released, it is believed that the figure was slightly less than 1997's 58 million MT. Most analysts believe that production will improve slightly in 1999, but not by much more than 2 million MT over 1997 production.

The latest wild card in efforts to estimate China's corn consumption comes from major revisions that have been made in China's official estimates of animal inventories. The official estimate of how many pigs and cattle China had at the end of 1996 has been reduced over 20 percent from what was previously reported. The question, simply put, is to whether to increase estimates of per animal consumption of corn, or reduce total consumption of corn. If the latter strategy is followed, then the world's PS&D estimates for Chinese corn

consumption, stocks and trade require serious re-examination.

Stocks

The Jilin Corn Wholesale Market published a report at the end of last year which included data on the level of corn supplies (production and trade), consumption and changes in stocks in China each year since 1992. Part of those data, regarding consumption and changes in corn stocks are reproduced below. According to this report, China's utilization of corn increased sharply from 1993 to 1997, most of it due to feed use. The slowdown in demand beginning in 1997 coincides with slower expansion in the livestock sector. The second interesting point in these data is that even with corn usage growing sharply from 1994 to 1997, stocks of corn reportedly increased. The report does not say how stocks are being measured (i.e., end of year, mid-year including new production, commercial vs. strategic stocks, etc.), making it difficult to draw any conclusions about the absolute size of corn stocks.

CHINA'S CORN CONSUMPTION AND CHANGES IN STOCKS, 1992-1998

	Use (Million MT)	Annual Change in Use	Net Change in Stocks (Million MT)
1992	82.2		5.6
1993	77.4	-5.8%	14.2
1994	88.6	14.5%	1.9
1995	99.1	11.9%	17.9
1996	108.4	9.4%	19.4
1997	114.6	5.7%	-17.3
1998	115.0	0.3%	5

Source: Jilin Corn Wholesale Market
f:\shared\lotus\grnfd\corn\jilindat.wk

Trade

The only question regarding China's corn export situation is how much corn it will export. In the first quarter of MY1999/2000, China had already exported 1.2 million MT of corn, most of it to Malaysia, South Korea and a small amount to Japan. However, the corn exports in MY1998/99 are expected to be limited by two factors. First, while world corn prices have fallen below $90/MT, China's leaders appear unwilling to allow China's corn export prices to fall below $105/MT set in 1998, and since lower prices would increase the level of government export subsidies. If China's corn export prices were allowed to fall lower, this would likely only push prices elsewhere even lower, leaving China's corn prices still too expensive. Second, even if Chinese corn were more competitively prices, it is not clear that there are markets for this corn, as major importers have already fixed their purchase plans for the remainder of MY1998/99.

Post estimates that China's corn exports in MY1998/99 will reach 3 million MT, and forecasts that corn exports will continue at this level in MY1999/2000. For the reasons stated above, we believe China will have a difficult time selling additional corn in the current market. If China's leaders decide to allow China's corn export prices to fall closer to world prices, this situation could change. Another factor that would affect on

China's future corn exports would be membership in the WTO. If this membership is won soon, and if it carries a commitment to cease subsidizing corn exports, this could result in lower corn exports in MY1999/2000 than those being forecast here. However, it is likely that China's membership would not become effective, or at least the export subsidy disciplines would not take effect, before additional corn was exported.

Tariffs

China maintains a tariff rate quota (TRQ) system for corn as well as other grains, but does not publish either the quantities for in-quota tariff treatment or the procedures for administering the system. China's TRQ regime for bulk commodities is currently being addressed in the context of talks regarding China's accession to the WTO.

Table 8. Tariff Rates for Corn, Effective January 1, 1998

	Tariff No.	In Quota Duty	Out of Quota		
			MFN	General	VAT
Maize (corn) for seed	10051000	0.0%	40.0%	180.0%	13.0%
Other Maize (corn)	10059000	1.0%	114.0%	180.0%	13.0%
Maize flour	11022000	9.0%	91.2%	130.0%	13.0%
Groats and meal of maize	11031300	9.0%	91.2%	130.0%	13.0%
Other worked maize	11042300	35.0%	114.0%	180.0%	13.0%
f:\shared\lotus\grnfd\tarfsum.wk4					

RICE

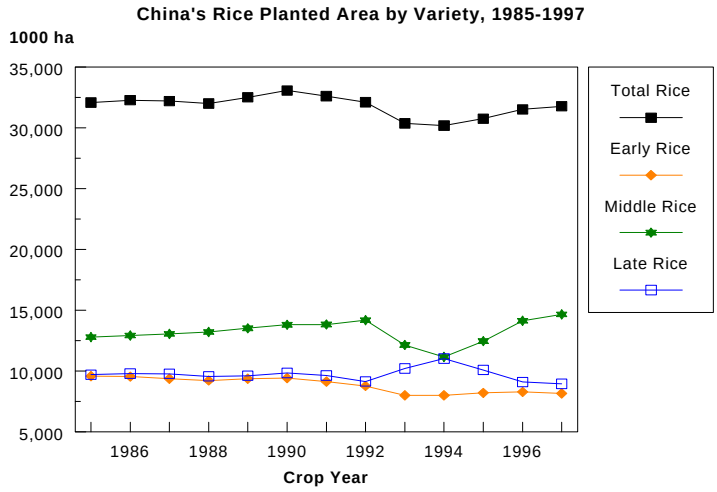
Table 9. Rice PS&D Table, 1997-1999

RICE	MY1998		MY1999		MY2000	
Market Year Begin	**01/1998**		**01/1999**		**01/2000**	
Crop Year	**1997**		**1998**		**1999**	
	Old	**New**	**Old**	**New**	**Old**	**New**
Area Harvested	31,800	31,765	31,500	31,500	0	31,200
Beginning Stocks	23,404	23,404	27,094	25,420	0	18,170
Milled Production	140,490	140,517	129,500	129,500	0	136,500
Rough Production	200,700	200,738	185,000	185,000	0	195,000
Milling Rate(.9999)	1	1	1	1	0	1
TOTAL Imports	200	244	450	250	0	500
Jan-Dec Imports	200	244	450	250	0	500
Jan-Dec Import U.S.	1	1	0	1	0	2
TOTAL SUPPLY	164,094	164,165	157,044	155,170	0	155,170
TOTAL Exports	2,000	3,745	1,000	1,000	0	1,000
Jan-Dec Exports	2,000	3,745	1,000	1,000	0	1,000
TOTAL Dom. Consumption	135,000	135,000	136,000	136,000	0	138,000
Ending Stocks	27,094	25,420	20,044	18,170	0	16,170
TOTAL DISTRIBUTION	164,094	164,165	157,044	155,170	0	155,170

Production

Post estimates that China's rice production in 1998 will reach only 185 million MT (paddy basis), down from over 200 million MT in 1997. The principal reason for the decline is weather. Last summer's floods cut early and middle rice production by washing out fields, and indirectly hurt late rice production by destroying inputs and diverting farmers' energies from planting to flood control.

Graph 6. Rice Production by Type of Rice, 1982-1997



About half of China's rice production is middle rice and the other half is evenly divided between early rice and late rice. The trend is towards greater production of northern, japonica rice, which is included in middle rice statistics. Planted area for northern rice, especially in Heilongjiang, has increased sharply in the past three years. The government has begun increasing the premium paid for middle and late rice in order to discourage early rice production, of which the government is reported to hold large stocks.

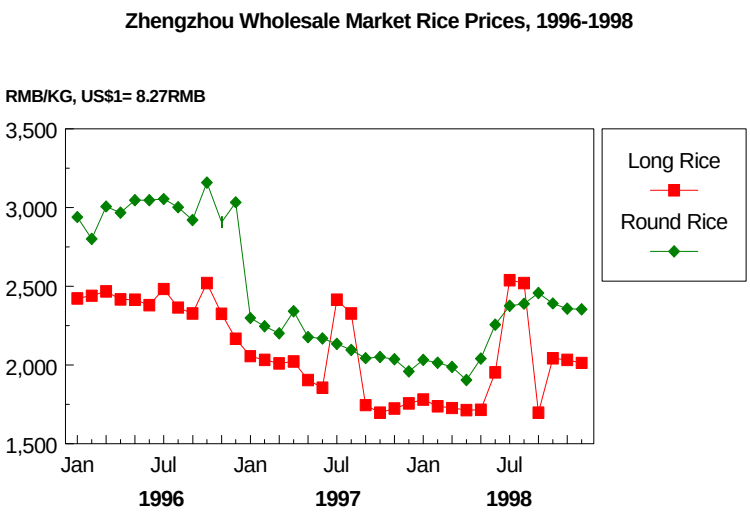
Table 10. Rice Area, Production and Yields by Type and Province, 1996-1997 (1,000 HA; 1,000 MT; MT/HA)

PROVINCE	1996				1997			
	Area	Prod	Yield	Share of Prod	Area	Prod	Yield	Share of Prod
EARLY RICE								
Hunan	1,669	8,716	5221	19.8%	1,651	9,452	5724	20.6%
Guangdong	1,303	7,844	6018	17.8%	1,301	7,880	6055	17.2%
Jiangxi	1,363	6,694	4910	15.2%	1,350	6,633	4913	14.5%
Zhejiang	873	4,733	5419	10.8%	828	4,667	5634	10.2%
Hubei	692	3,701	5347	8.4%	680	4,150	6103	9.1%
Other Provinces	2,382	12,294	5160	28.0%	2,350	12,995	5530	28.4%
TOTAL	8,284	43,982	5,309	100.00%	8,161	45,777	5609	100.0%
MIDDLE RICE								
Jiangsu	2,318	18,562	8008	18.7%	2,362	19,201	8129	18.3%
Sichuan	2,982	21,611	7247	21.8%	2,173	16,519	7602	15.7%
Hubei	969	8,502	8774	8.6%	1,001	8,992	8982	8.6%
Heilongjiang	1,108	6,360	5740	6.4%	1,397	8,609	6163	8.2%
Anhui	1,228	8,711	7094	8.8%	1,304	8,388	6433	8.0%
Other Provinces	5,523	35,607	6447	35.8%	6,417	43,315	6750	41.2%
TOTAL	14,128	99,353	7032	100.00%	14,654	105,024	7167	100.0%
LATE RICE								
Hunan	1,881	12,597	6697	24.3%	1,910	11,910	6237	23.9%
Jiangxi	1,452	8,086	5569	15.6%	1,472	8,064	5479	16.1%
Guangdong	1,410	7,648	5424	14.8%	1,403	7,945	5664	15.9%
Zhejiang	967	5,986	6189	11.6%	913	5,407	5925	10.8%
Hubei	788	5,015	6366	9.7%	785	5,088	6482	10.2%
Guangxi	1,143	5,188	4538	10.0%	1,144	5,050	4415	10.1%
Other Provinces	1,454	7,247	4985	14.0%	1,280	6,473	5059	13.0%
TOTAL	9,095	51,767	5692	100%	8,905	49,937	5608	100.0%

Source: MOA's Statistical Yearbooks 1996, 1997
(f:\shared\lotus\estimate\grain\rice97)

Prices

Graph 7. Chinese Wholesale Rice Prices, 1996-1998



China's wholesale 1998 rice prices were higher at the end of the year, but still below those of the previous two years. For the most part long grain rice prices remained below those of round rice, except for briefly in mid-year due to speculation about the extent of damage to the late rice crop from flooding. By the end of the year, both prices were starting to gradually fall again.

Consumption

Industry analysts estimate that 85 percent of China's polished rice, around 120 million MT, goes to human consumption, around 5 percent goes for seed and industrial use (beer production) and another 5 percent is used for animal feed. The amount of rice that goes to animal feed is growing. Most of this, as well as the rice used to make beer and fed to students, soldiers and other low-income consumers is early rice. With growing incomes, Chinese are eating less rice and more vegetables and meats. This, in part, explains the general pattern of decline in wholesale, and presumable of retail prices (no retail price data available). Another trend that began several years ago and is continuing is that Southern Chinese, who previously preferred long grain Indica rice, are switching to more flavorful, short grain Japonica rice.

Trade

China's rice imports fell further in 1998, but are forecast to expand in 1999 and 2000. Virtually all the rice China imported in 1998 was fragrant rice from Thailand, and this trend is expected to continue as urban consumers demand better rice in China. The Chinese government has issued statements that it intends to control these imports for quality in response to charges that not all imported rice is in fact 100 percent pure fragrant rice as labeled.

On the export side, China's rice exports exploded in 1998, with virtually all sales going to other Asian nations, particularly the Philippines and Indonesia. China appears to be following the same strategy regarding rice as that with corn, namely, moving some of its surplus production off shore in order to cut stocks, strengthen domestic prices, and earn foreign exchange. However, it is not clear if China is committed to a export subsidy policy for rice similar to that for corn. Post forecasts that rice exports will drop back to one million MT in 1999 due to the short 1998 rice crop. Further, growing competition from other rice producers in southeast Asia, where currencies have been devalued, will make it more difficult for China to export rice in the future.

Tariffs

China maintains a tariff rate quota (TRQ) system for rice as well as other grains, but does not publish either the quantities for in-quota tariff treatment or the procedures for administering the system. China's rice trade is as tightly controlled by COFCO, the state grain trading agency, as wheat and corn trade. China's TRQ regime for bulk commodities is currently being addressed in the context of talks regarding China's accession to the WTO.

Table 11. Tariff Rates for Rice, Effective January 1, 1998

	Tariff No.	In Quota Duty	Out of Quota		
			MFN	General	VAT
Rice for seed	10061010	0.0%	114.0%	180.0%	13.0%
Other rice	10061090	1.0%	114.0%	180.0%	13.0%
Husked (brown) rice	10062000	1.0%	114.0%	180.0%	13.0%
Milled or semi milled rice	10063000	1.0%	114.0%	180.0%	13.0%
Broken rice	10064000	1.0%	40.0%	180.0%	13.0%
Rice flour	11023000	9.0%	91.2%	130.0%	13.0%
Groats and meal of rice	11031400	9.0%	40.0%	70.0%	13.0%
f:\shared\lotus\grnfd\tarfsum.wk4					

SORGHUM

Table 12. Sorghum PS&D Table, 1997-1999

SORGHUM	**MY1997/98**		**1998/99**		**MY1999/2000**	
Market Year Begins	**10/1997**		**10/1998**		**10/1999**	
Crop Year	**1997**		**1998**		**1999**	
	Old	**New**	**Old**	**New**	**Old**	**New**
Area Harvested	1,300	1,083	1,300	1,100		1,100
Beginning Stocks	327	327	277	335		295
Production	4,200	3,639	5,700	5,000		5,000
TOTAL Mkt. Yr. Imports	0	0	0	0		0
Oct-Sep Imports	0	0	0	0		0
Oct-Sep Import U.S.	0	0	0	0		0
TOTAL SUPPLY	**4,527**	**3,966**	**5,977**	**5,335**	**0**	**5,295**
TOTAL Mkt. Yr. Exports	50	31	50	40		40
Oct-Sep Exports	50	31	50	40		40
Feed Dom. Consumption	2,000	3,000	3,300	3,000		3,100
TOTAL Dom. Consumption	4,200	3,600	5,600	5,000		5,100
Ending Stocks	277	335	327	295		155
TOTAL DISTRIBUTION	**4,527**	**3,966**	**5,977**	**5,335**	**0**	**5,295**

Production

The State Statistical Bureau (SSB), the official source of Chinese government economic data, no longer publishes data on sorghum production. The production data in this report come from a Ministry of Agriculture (MOA) data series which parallels closely the SSB series. China's sorghum harvested area, yields and production fell in 1997 due to drought, but yields are estimated to have recovered in 1998. However, the area for growing sorghum is believed to have fallen to around 1.1 million MT, and it is expected to remain at the level in 1999. Half of China's sorghum is grown in the northeastern provinces of Liaoning, Jilin and Heilongjiang. Another quarter is grown in Inner Mongolia and Shanxi.

Consumption

Sorghum is mainly used in China for making alcohol. Feed use of sorghum has not caught on in China primarily because it does not give poultry the yellow color that Chinese prefer. Because of this preference, and in spite of low world prices and low tariffs on sorghum (see below), China has not yet imported sorghum.

Table 13. Sorghum Area, Production and Yields by Province, 1996 and 1997

PROVINCE	1996				1997			
	Area	Prod	Yield	Share of Prod.	Area	Prod	Yield	Share of Prod.
Liaoning	300	1,694	5647	30.6%	258	993	3855	27.3%
Heilongjiang	171	655	3830	11.8%	135	483	3580	13.3%
Jilin	150	748	4987	13.5%	134	476	3555	13.1%
Inner Mong.	170	742	4365	13.4%	112	463	4152	12.7%
Shanxi	127	607	4780	10.9%	105	335	3178	9.2%
Hebei	98	293	2990	5.3%	79	177	2243	4.9%
Other	276	937	3395	16.9%	262	713	2724	19.6%
TOTAL	1,292	5,676	4393	100.0%	1,084	3,640	3358	100.0%
Source: MOA's Statistical Year Book 96, 97 (f:\shared\lotus\grnfd\sghmprov.wk4)								

Trade

China exports a little sorghum, almost all of it to North Korea and Taiwan.

Table 14. Tariff Rates for Sorghum, Effective January 1, 1998

	Tariff No.	In Quota Duty	Out of Quota		
			MFN	General	VAT
Sorghum for seed	10070010	0.0%	0.0%	0.0%	13.0%
Other sorghum	10070090	0.0%	3.0%	8.0%	13.0%
f:\shared\lotus\grnfd\tarfsum.wk4					

BARLEY

Table 15. Barley PS&D Table, 1997-1999

BARLEY	**MY1997/98**		**MY1998/99**		**MY1999/2000**	
Market Year Begins	**10/1997**		**10/1998**		**10/1999**	
Crop Year	**1997**		**1998**		**1999**	
	Old	**New**	**Old**	**New**	**Old**	**New**
Area Harvested	1,300	995	1,200	1,000		1,000
Beginning Stocks	476	476	175	107		203
Production	3,000	3,481	3,800	3,500		3,500
TOTAL Mkt. Yr. Imports	2,000	1,459	2,000	1,600		1,700
Oct-Sep Imports	2,000	1,459	2,000	1,600		1,700
Oct-Sep Import U.S.	0	0	0	0		0
TOTAL SUPPLY	**5,476**	**5,416**	**5,975**	**5,207**		**5,403**
TOTAL Mkt. Yr. Exports	1	9	1	4		3
Oct-Sep Exports	1	9	1	4		3
Feed Dom. Consumption	2,500	3,000	2,000	2,000		2,100
TOTAL Dom. Consumption	5,300	5,300	5,500	5,000		5,200
Ending Stocks	175	107	474	203		200
TOTAL DISTRIBUTION	**5,476**	**5,416**	**5,975**	**5,207**		**5,403**

Production

The State Statistical Bureau (SSB), the official source of Chinese government economic data, does not publish data for barley production. The Ministry of Agriculture (MOA) began providing barley production data to round out its more detailed breakdown (compared to SSB) of total grain production in 1996. The estimates in this report come from that source, but with the following corrections. Data for area in 1996 in Henan province, and for production in 1997, in Shaanxi and Xinjiang provinces have been adjusted to correct for irregularities in the MOA data that are evident when yield data are considered.

Post has lowered its estimate for area planted to barley in 1997 from 1.3 to 1.0 million HA. Production in 1997 is now believed to have reached just under 3.5 million MT and last year's and this year's crop are expected to reach the same level.

Table 16. Barley Area, Production and Yields by Province, 1996 and 1997

Province	1996				1997			
	Area	Production	Yield	Share of Production	Area	Production	Yield	Share of Production
Jiangsu	313,700	1,414,686	4510	40.0%	275,850	1,189,051	4310	34.2%
Zhejiang	142,060	497,750	3504	14.1%	149,670	529,000	3534	15.2%
Anhui	81,752	272,854	3338	7.7%	76,500	293,635	3838	8.4%
Sichuan	74,400	278,000	3737	7.9%	76,894	293,113	3812	8.4%
Xinjiang	54,720	173,855	3177	4.9%	60,000	190,000	3167	5.5%
Gansu	8,290	30,889	3726	0.9%	34,010	178,188	5239	5.1%
Hubei	51,320	152,708	2976	4.3%	53,160	173,866	3271	5.0%
Yunnan	71,509	141,193	1974	4.0%	82,438	165,863	2012	4.8%
Other Provinces	193,463	574,468	2969	16.2%	146,974	468,721	3189	13.5%
TOTAL	991,214	3,536,403	3568	100.0%	955,496	3,481,437	3644	100.0%
Source: Ministry of Agriculture f:\shared\lotus\histdata\g&f\barley.wk4								

Consumption

The Chinese government does not report on how local barley is utilized. Most of it is believed to be of low quality and used for feed. The exception is barley produced in the Northwest (Xinjiang and Gansu provinces) which is used in beer consumption. Growth in China's beer industry, which relies mostly on imported barley, has slowed down in recent years along with the rest of China's economy.

Trade

Barley imports are forecast to grow to 1.7 million MT in MY1998/99, after falling to 1.5 million MT in MY1997/98 (MY1996/97 barley imports were 1.8 million MT). Australia and Canada continue to dominate China's barley imports, providing 52 and 39 percent, of China's imports respectively, in MY1997/98. Unconfirmed reports are that approximately 200,000 MT of barley imports in calendar year 1998 were feed quality from Europe.

Tariffs

China maintains a tariff rate quota (TRQ) system for barley as well as other grains, but does not publish either the quantities for in-quota tariff treatment or the procedures for administering the system. China's TRQ regime for bulk commodities is currently being addressed in the context of talks regarding China's accession to the WTO.

Table 17. Tariff Rates for Barley Grains, Effective January 1, 1998

	Tariff No.	In Quota Duty	Out of Quota		
			MFN	General	VAT
Barley for seed	10030010	0.0%	91.2%	160.0%	13.0%
barley	10030090	3.0%	91.2%	160.0%	13.0%
Rolled grains of barley	11041100	40.0%	114.0%	180.0%	13.0%
Worked grains of barley	11042100	40.0%	114.0%	180.0%	13.0%
f:\shared\lotus\grnfd\tarfsum.wk4					

EDIBLE BEANS

Table 18. Edible Beans PS&D Table, 1997-1999

EDIBLE BEANS	MY1997/98		1998/99		MY1999/2000	
Market Year Begins	10/1997		10/1998		10/1999	
Crop Year	1997		1998		1999	
	Old	**New**	**Old**	**New**	**Old**	**New**
Area Harvested	2,500	2,817	2,500	2,600		2,600
Beginning Stocks	0	0	0	0		0
Production	3,500	4,030	3,500	4,000		4,000
TOTAL Mkt. Yr. Imports	0	0	0	0		0
Jul-Jun Imports	0	0	0	0		0
Jul-Jun Import U.S.	0	0	0	0		0
TOTAL SUPPLY	3,500	4,030	3,500	4,000		4,000
TOTAL Mkt. Yr. Exports	1,200	327	1,200	500		500
Jul-Jun Exports	1,200	327	1,200	500		500
Feed Dom. Consumption	0	0	0	0		0
TOTAL Dom. Consumption	2,300	3,703	2,300	3,500		3,500
Ending Stocks	0	0	0	0		0
TOTAL DISTRIBUTION	3,500	4,030	3,500	4,000		4,000

Production

The State Statistical Bureau (SSB), the official source of Chinese government economic data, does not publish data for minor bean production. The Ministry of Agriculture (MOA) provides data on “minor bean” production to round out its more detailed breakdown (compared to SSB) of total grain production. Minor beans are believed to include adzuki, kidney, mung, broad and other beans. Minor bean production in 1997, according to MOA, was not as severely affected by the drought which reduced production of corn and other feed grains. However, area planted was sharply down in 1997 from previous years. We believe this reflects the government grain policy of maximizing area planted to cereal grains.

Consumption

There are no published data on minor beans. It appears that local consumption varies depending on export opportunities. We believe that minor beans are used almost exclusively for food consumption.

Trade

Minor bean exports continued their decline that started in MY1996/97. However, it appears that MY1998/99 will be better based on July-December 1998 traded data. The largest decline in China's edible bean exports over the past three years has occurred in kidney beans. Kidney bean exports in MY1998 are expected to be down 32 percent since MY1996.

Table 20. Tariff Rates for Edible Beans, Effective January 1, 1998

	Tariff No.	In Quota Duty	Out of Quota		
			MFN	General	VAT
Mung bean for seed	7133110	0.0%	0.0%	0.0%	17.0%
Other mung bean	7133190	0.0%	3.0%	11.0%	17.0%
Adzuki bean for seed	7133210	0.0%	0.0%	0.0%	17.0%
Other adzuki bean	7133290	0.0%	6.0%	14.0%	17.0%
Kidney bean for seed	7133310	0.0%	0.0%	0.0%	17.0%
Other kidney bean	7133390	0.0%	8.0%	20.0%	17.0%
Broad bean for seed	7135010	0.0%	0.0%	0.0%	17.0%
Other broad bean	7135090	0.0%	8.0%	20.0%	17.0%
Other dry beans	7133900	0.0%	8.0%	20.0%	17.0%
f:\shared\lotus\grnfd\tarfsum.wk4					