China Becoming a Net Importer of Oilseeds, Oil, and Meal

As grains competed with oilseeds and other crops for land induced by high grain procurement prices, production of the four major oilseeds and hence, China's total oilseeds, declined in 1996. China will become a net importer of oilseeds, oil, and oil meal in 1996/97. While total oil imports in 1996/97 will be still lower than the level of 1994/95, oilseed and oil meal imports are expected to more than double. In 1996/97, the United States will reduce soy oil exports to China, but U.S. soybeans and soybean meal exports to China will increase. In the coming year, China will be a growing market for oilseeds and oilseed products. [Xinshen Diao, (202) 219-0690]

A drop in production of the three major oilseeds (cottonseed, rapeseed and peanuts) reduced China's total oilseeds production by 5.3 percent in 1996. Higher procurement prices for corn, rice, and wheat induced many farmers to switch cropland from oilseed to grain production. In 1997, total oilseed planted area and production will remain below 1995's record levels but higher than 1996's levels. In 1996/97, China made the move from being a net oilseed exporter to a net oilseed importer. Total exports of the top five oilseeds dropped, while imports rose. This trend will likely continue in 1997/98.

A major increase in soybean imports in 1996/97 will result in slightly increased oilseed meal production, even though total oilseed production declined. Demand for oil meal is increasing steadily. China has gone from being a net exporter of oil meal to a net importer. Estimated total meal imports will reach 3.3 million tons, and soy meal will continue to account for the bulk of the trade in oilseed meal.

Total vegetable oil production will decline by 48,000 tons in 1996/97 because of the large drop in oilseed production in 1996. It is forecast to recover only slightly in 1997/98. Consumption of oil is growing at a quick pace because of increased consumer and industrial demand. Total oil imports will increase in 1996/97 and again in 1997/98.

Major Oilseeds Production Down in 1996

Production and planted area of the four major oilseeds (soybeans, peanuts, rapeseed, and cottonseed) account for more than 95 percent of China's total oilseed area and production. In 1995, the share of each oilseed in total oilseed output was: soybeans, 31.3 percent; peanuts, 23.6 percent; rapeseed, 22.6 percent; and cottonseed, 19.5 percent. In the last 2 years, soybean output fell from 16 million tons in 1994 to 13.5 million tons in 1995 and 1996. For peanuts, rapeseeds, and cottonseeds, production in 1996 fell by 0.06, 0.61 and 0.88 million tons, respectively, from the previous year, compared with production increases in 1994 and 1995.

High grain prices induced many farmers in northeastern China's Heilongjiang province, where over a third of the country's soybeans are produced, to switch from soybean to corn production. Soybean planted area in 1996 dropped about 4 percent from the previous year. Soybean production in other provinces was less affected by the increase in grain prices since the crop farther south is grown as a food staple rather than for crushing. With a 4.2-percent increase in soybean yields, soybean production kept at the same level of 1995. Declines in corn prices in 1996 and 1997 may cause farmers in the northeast to shift some of their land back into soybeans and hence, soybean production is expected to rise in 1997. However, it is highly unlikely that the recovery in soy-

Table 15--China's oilseed output and trade

Indicator	1994/95	1995/96	1996/97
	1,000 tons		
Total oilseeds 1/			
Production	42,248	43,187	40,910
Imports	401	807	1,902
Exports	913	736	650
Soybeans (Jul/Jun)			
Production	16,000	13,500	13,500
Imports	155	795	1,900
Exports	394	222	200
Cottonseed (Oct/Sep)			
Production	7,704	8,440	7,560
Imports	5	2	2
Exports	15	10	10
Peanuts (Oct/Sep)			
Production	9,682	10,200	9,500
Imports	6	10	0
Exports	470	457	400
Rapeseed (Oct/Sep)			
Production	7,492	9,777	9,060
Imports	235	0	0
Exports	0	7	0
Sunflowerseed (Oct/Sep)			
Production	1,370	1,270	1,290
Imports	0	0	0
Exports	30	40	40

1/ USDA definition includes soybeans, cottonseed, peanuts, rapeseed and sunflowerseed.
Source: USDA PS&D database.

bean production will be completed given the greater income per hectare of corn. Corn yields are approximately 2.7 to 3.5 times higher per hectare than soybean yields, a fact that has brought corn farmers nearly 1.5 times more gross income per hectare over the past 5 years than they could have earned growing soybeans. Corn prices would have to drop dramatically to bring corn on par with soybeans, and this is unlikely given the current government's "grain bag" policy.

In addition to low returns from soybeans, farmers in Heilongjiang province are still reeling from provincial government policies that prohibited movement of unprocessed soybeans outside of the province. Implemented in 1995 to assist the provincial crushing industry, this policy not only caused prices to drop, but forced buyers to develop sources elsewhere. Despite the fact that the policy was partially abolished on January 1, 1997, farmers are still feeling the effects from imports.

The decline in rapeseed production stemmed from reductions in area as well as in yields. High rapeseed oil imports in 1994/95, and bumper crop production in 1995, drove up stocks of oil and seed, making it difficult for farmers to find buyers for their rapeseed. Also, rapeseed production is relatively labor intensive, and the field preparation is done in cold fall weather. Farmers have other options when the rapeseed price falls: working in township enterprises, planting winter vegetables, or staying at home. These, in tandem with high procurement prices for grains, induced farmers to decrease planted area by 3.4 percent in 1996. In addition, yields of rapeseed in 1996 fell by 2.9 percent from 1995's record. A decline in rapeseed stocks and a partial reduction in rapeseed oil stocks could induce area and production to recover in 1997. However, a complete recovery is unlikely because of continued high grain procurement prices.

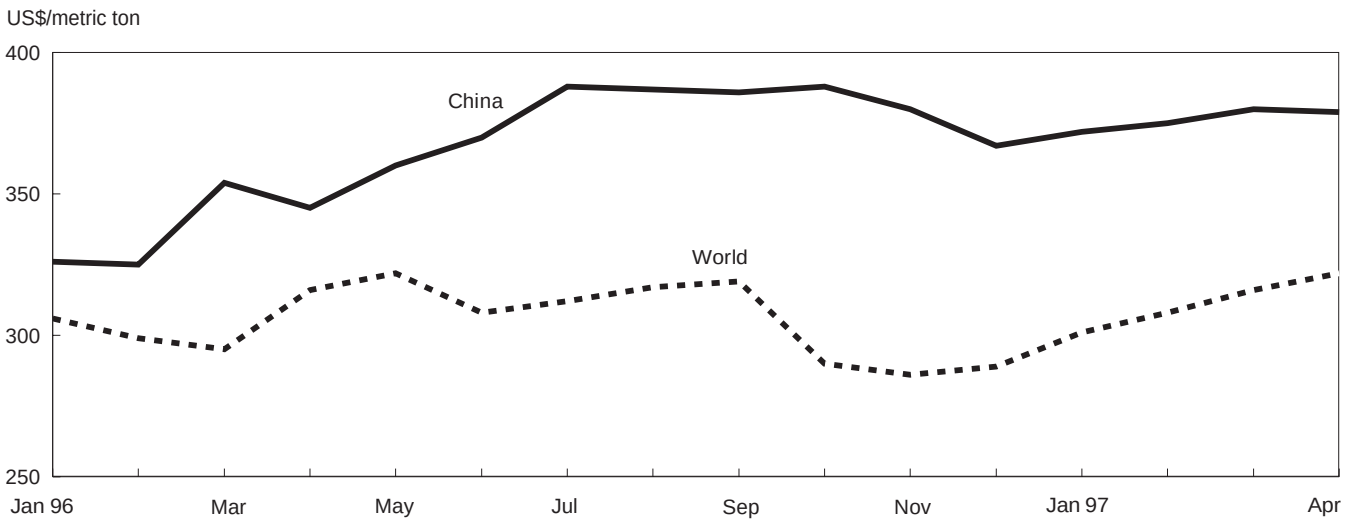
Saddled with high production costs and low yields, peanut farmers in major growing regions also switched to raise other more lucrative crops. Peanut planted area fell by 1 percent. Insufficient sunshine in major producing provinces such as Shandong also accounted for some of the drop. The average yields of peanuts fell by 0.4 percent. Hence, the output in 1996 fell 0.6 percent to 10.1 million tons.

Cottonseed production suffered the biggest decline as farmers shifted away from intercropping wheat and cotton, to growing only wheat. Area declined from 5.4 million hectares in 1995 to 4.7 million hectares in 1996. This shift was brought about by high input costs, low procurement prices, and low returns. An additional decline in planted area in 1997 is expected for the same reasons.

China's switch from being a net oilseed exporter to a net oilseed importer occurred in 1996/97. Total 1996/97 exports of the top five oilseeds dropped to 0.65 million tons while imports reached 2.1 million tons. In the space of 3 years, China went from net exports of 1.6 million tons in 1993/94 to estimated net imports of 1.5 million tons in 1996/97. Soybean imports account for 99 percent of total oilseed imports.

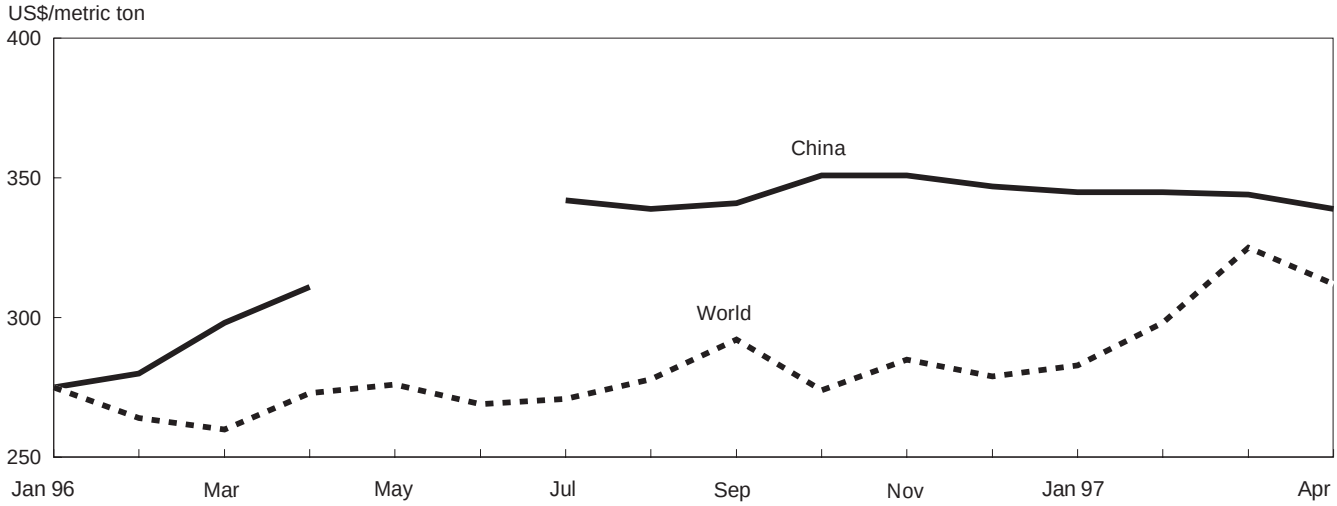
Assuming import policies for soybeans do not change, the lucrative difference between home and foreign prices will further stimulate soybean imports (figure 17). At the beginning of 1996, China announced that it would implement tariff-rate quotas for several commodities, including soybeans. However, quota amounts were never announced, and the situation continued as before, with import licenses required but readily available. April 1, 1997 is the beginning of 1997/98's quota year, and there have been rumors that China would impose a restrictive quota on imports. The rumors caused imports to pick up prior to January 1, 1997 as importers tried to get product into China before the deadline.

Figure 17
China's domestic soybean wholesale prices and world market prices compared



World market prices are Rotterdam fob prices. China prices from East West Consultants, Ltd., China.

Figure 18
China's domestic soy meal wholesale prices and world market prices compared



World market prices are Hamburg fob prices. China prices from East West Consultants, Ltd., China.

Table 16--China's meal output and trade

Indicator	1994/95	1995/96	1996/97
		1,000 tons	
Total meal 1/			
Production	16,755	17,759	17,773
Imports	729	1,589	3,125
Exports	1,979	985	985
Soy meal (Jul/Jun)			
Production	6,554	6,038	6,885
Imports	50	929	2,500
Exports	1,275	100	100
Peanut meal (Oct/Sep)			
Production	2,165	2,285	2,197
Imports	0	0	0
Exports	38	8	10
Rapeseed meal (Oct/Sep)			
Production	4,311	5,452	5,071
Imports	11	0	0
Exports	86	307	300
Cottonseed meal (Oct/Sep)			
Production	3,113	3,344	2,914
Imports	0	0	0
Exports	500	490	500
Sunflowerseed meal (Oct/Sep)			
Production	542	470	476
Imports	0	0	0
Exports	80	80	75
Fish meal (Oct/Sep)			
Production	170	170	230
Imports	668	60	625
Exports	0	0	0

1/ USDA definition includes soybean meal, peanut meal, rapeseed meal, cottonseed meal, sunflowerseed meal, and fish meal.

Source: USDA PS&D database.

Peanut exports account for more than 60 percent of total oilseed exports. In 1996/97, peanut exports are expected to fall by nearly 13 percent.

Oil Meal Production Down; Imports Up in 1996/97

Total oil meal production will rise slightly in 1996/97 as soybean imports will offset the reduction in production. However, demand for oil meal is greater, and China will continue to be a net importer of oil meal in 1996/97. Total net imports are expected to amount to 2.44 million tons. All oilseed meal imports are soybean meal. Stimulated by the profit margin from the price gap between domestic and foreign meal, soy meal imports will soar to 2.7 million tons in 1996/97 (figure 18). With modest growth in domestic soybean and peanut production and growing demand for protein meals, 1997/98 is likely to see further growth in soy meal imports.

Oil Imports Keep Stable in 1996/97

With oilseed production down and weak returns for crushers because of large oil imports, vegetable oil production is down in 1996/97. Soybean and rapeseed production will rebound slightly in 1997, and increased soybean imports in 1996/97 and 1997/98 will increase crush. So oil production will rebound in 1997/98.

Lack of stock numbers for China oilseed and oilseed products make it difficult to estimate domestic consumption figures, but combined domestic production and imports of vegetable oil in 1996/97 showed an increase of 6.1 percent to 10.04 million tons. It is reasonable to believe that oil consumption is growing steadily and could reach about 9.54 million tons in 1996/97. Oil stocks, on the other hand, have fluctuated widely, beginning with an enormous accumulation of rape and soy oil in 1994/95 when oil prices were rising. These stocks have been reduced somewhat by the end of 1996, but soy oil stock is believed still high, as the wide gap (more than 50 percent) between domestic and international prices (figure 19) tends to encourage vegetable oil imports.

Table 17--China's main vegetable oil output and trade

Indicator	1994/95	1995/96	1996/97
		1,000 tons	
Total oils 1/			
Production	5,964	6,653	6,430
Imports	4,431	2,811	3,432
Exports	574	391	481
Soybean oil (Oct/Sep)			
Production	1,214	1,147	1,309
Imports	1,702	1,445	1,500
Exports	89	66	150
Peanut oil (Oct/Sep)			
Production	1,354	1,430	1,374
Imports	18	5	5
Exports	13	6	6
Rapeseed oil (Oct/Sep)			
Production	2,295	2,904	2,700
Imports	944	303	375
Exports	242	119	125
Palm oil (Oct/Sep)			
Imports	1,667	1,006	1,500
Exports	230	200	200

1/ Percentage of each crop crushed for oil is given in parentheses. USDA definition of China's oil production includes oils crushed from soybeans (51%), cottonseed (83%), peanuts (59%), rapeseed (90%), and sunflowerseed (72%), while oil imports and exports include soy oil, peanut oil, rapeseed oil, palm oil, coconut oil, and olive oil.

Source: USDA PS&D database.

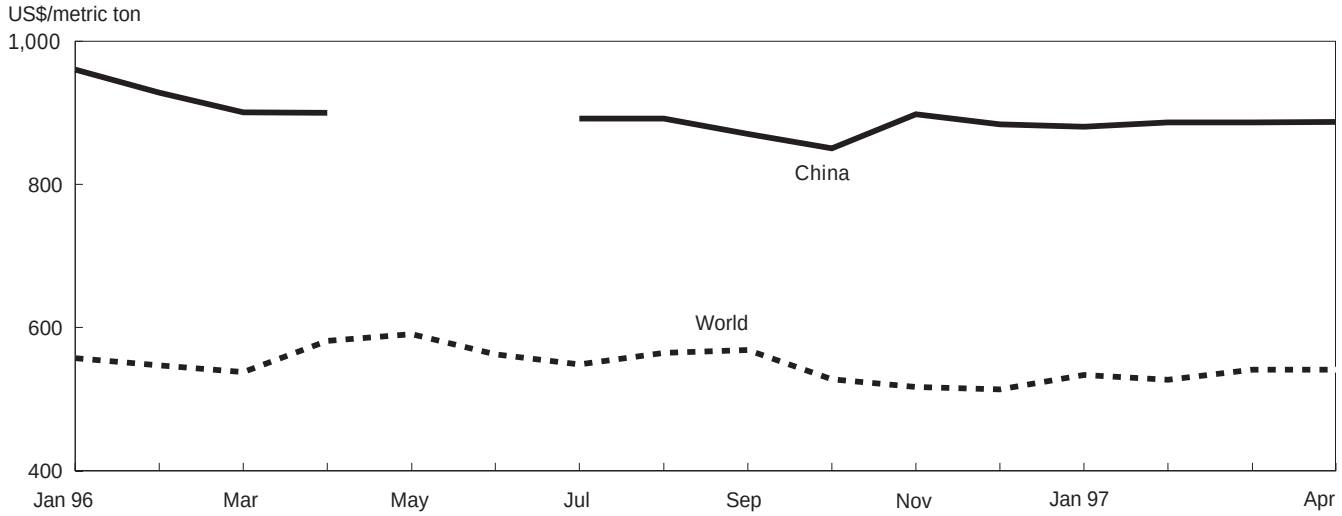
Oil consumption is growing because of increased consumer and industrial demand. Rising incomes have translated into higher per capita oil consumption, particularly in urban areas. Although China's Statistical Yearbook reported that oil consumption directly purchased by households have grown slowly in the last 5 years, consumption in work place cafeterias and restaurants is believed to have grown rapidly. However, non-home cooking oil consumption is not included in the household survey data, making it very difficult to estimate the total amount of oil consumption. Development of the domestic food processing industry (e.g., snack food and noodles) has also driven up oil consumption.

While China's consumers have traditionally preferred crude vegetable oil because "it has more color and flavor," preferences are changing. Urban consumers are increasingly choosing refined oil. In response, many crushers are converting some of their refining capacity over to production of high-grade salad oil, and advanced crushing equipment with larger production capacity has been installed. For example, Guangdong, the most open and fastest growing province in China, imported 0.5 million tons of unrefined palm oil in 1995/96, which was equivalent to one-half of China's imports of palm oil in that year. Most of the imports were used to produce high-grade refined oil.

China announced tariff-rate quotas on soybeans and selected oil at the beginning of 1996 but never announced annual quotas for implementation on April 1, 1996. Instead, it has maintained its old system of announcing quotas for specific oils as trade administrators deem necessary. Total quotas are not announced in advance but are issued piecemeal throughout the year. Last year, quotas for palm oil and soy oil were made available and not filled entirely. China has not announced its intentions with regard to quotas for the 1997/98 quota year yet, but industry experts speculate that China will continue issuing specific quotas and that larger quotas will be issued now that overall stocks have dropped.

By the beginning of 1997, palm oil stocks were low and soy oil stocks had dropped. While rape oil prices have rebounded in some provinces now that rape oil stock levels are down, stocks in other provinces remain high. This is be-

Figure 19
China's domestic soy oil wholesale prices and world market prices compared



World market prices are Dutch fob prices. China prices from East West Consultants, Ltd., China.

cause the price at which the oil was purchased almost 3 years ago is still above the market price, and those holding it are unwilling to take a loss.

Given these current supply and consumption trends and barring a change in China's policy of promoting grain production at the expense of oilseed production, total oil imports are expected to climb to roughly 3.5 million tons in 1996/97 and 1997/98.

In an effort to reduce smuggling of palm oil, China reduced tariffs on January 1, 1997, from 18 percent for crude and refined palm oil to 9 percent for crude palm oil and 12 percent for refined. Given that tariffs for crude palm oil are now below that of soy oil, the relative share of imports could change. With palm oil running at a premium, however, because of tight world supplies, the majority of imports in 1996/97 are expected to be soy oil.

Increased imports of soybean and soybean products by China created good market opportunities for U.S. soybean growers and soybean meal producers, but shipments of soy oil from the United States fell.

Outlook for 2005

Given China's food "self-sufficiency" policy, the government will continue to encourage grain production. By raising procurement prices of rice, wheat, and corn or increasing input subsidies in grain production, the profitability of grain will rise relative to non-grain crops such as oilseeds. Weak growth of oilseed output is one major potential risk of the government's current grain policy. ERS projects that total oilseed production will increase by 15 percent, while soybean production will increase by 19 percent between 1997 and 2005, slower than in the last 10 years.

On the demand side, however, demand for vegetable oil and oilseed meal will continue to rise. Vegetable oil for direct human consumption is expected to increase at 4-5 percent annually, while industrial consumption is increasing at a rate of 7-10 percent in the next 9 years. For oilseed meal demand, the proportion of processed feed used in animal rations, on average, is very low in China relative to other countries. Many farmers are still using straw and sweet potato greens, for example, for feed. With rapid growth of the feed industry driven by increased demand for meat, China will likely remain a good market for oil meal. ERS projects that oil meal imports will increase by more than 70 percent between 1997 and 2005.

To implement its grain policy, the government will continue to regulate grain and major nongrain crops' markets through trade restraints, controls on export/import rights of selected corporations and import quotas. These policies are expected to widen the gap between domestic and world prices for oilseeds and oilseed products for the next 8 years.

References

1. China's Customs Statistics, 1995 and 1996.

2. China Monthly Statistics, December 1996 and January 1997.

3. "Statistical Communique on 1996 Development," Beijing Xinhua Domestic Service, April 3, 1997.

4. Foreign Agricultural Service, Beijing Ag. Office, "Oilseeds and Products Annual Report," March 1, 1997.

Table 18--China's calendar year soybean and soybean product imports

Indicator	1995		1996	
	Volume	Value	Volume	Value
	Tons	US$1,000	Tons	US$1,000
Soybeans	293,938	75,488	1,107,539	320,348
United States	143,915	39,033	859,678	253,154
Argentina	93,680	23,703	117,987	34,574
Russia	40,801	8,018	66,275	11,973
Brazil	7,000	2,188	52,747	17,386
Canada	7,053	2,086	10,185	3,077
Soybean oil	1,481,813	1,023,914	1,295,396	764,488
Brazil	806,079	549,836	955,652	564,610
Argentina	93,182	64,246	172,633	99,995
United States	495,328	353,801	51,271	31,330
Soybean meal	1,003	195	1,876,478	519,545
Brazil	0	0	759,499	210,722
Argentina	0	0	578,838	156,233
India	0	0	399,128	113,799
United States	600	144	105,126	31,992

Source: China's Customs Statistics, 1995-96 (commodity code for soybeans 1201; for soybean oil 15071 and 15079; and for soybean meal 2304).