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China, Peoples Republic of

Frozen Potato Products

China Situation

2003

Approved by:

Larry M. Senger

U.S. Embassy, Beijing

Prepared by:

Zhang Jianping/John Wade

Report Highlights:

Growth in Chinese frozen potato imports continues although at slower pace than in the past. Domestic potato industry has big hopes for expansion in frozen potato production but land and water constraints could be a problem. Import growth should continue in short term, but domestic production situation makes middle and long-term situation unclear.

Includes PSD changes: No
Includes Trade Matrix: No
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Production

China accounts for about 25 and 20 percent of the world's total planted area and production of potatoes respectively. Although China's planted area in 2001 remained almost the same as the previous year, bad weather lowered yields. In 2001, total production was 64.56 million mt. Official data for 2002 are not available yet, but total production is expected to have increased due to a slight increase in area and better weather. Planting conditions have been favorable in 2003 in the key North China growing areas, and farmers appear to have increased planted area. With weather continuing favorable, potato production is expected to increase in 2003. The Chinese potato industry is very bullish on future growth. Industry representatives expect that by 2010 China's total planted area will increase to 6 million hectares, 30 percent above current levels. They expect that yields will double.

The industry also has high hopes for increasing production of special potatoes for processed products such as chips and frozen processed potato products such as French fries. The industry says that this specialty production has increased sharply in recent years but that it still accounts for only 1 to 2 percent of total production. With such a small base, it seems likely that frozen potato imports will remain strong, at least for the next couple of years. In the long run, however, greater domestic production could hurt imports.

It is difficult, however, to say whether the industry can meet its ambitious targets. Questions remain as to how stiff import competition will be, and as to how much Chinese production will be constrained by limits on land and water resources. Although potatoes are considered the fourth main staple crop in China, following wheat, rice and corn, there is no central government strategy for potatoes as there is for these other crops. Irregular precipitation and lack of cheap irrigation is a big problem for potato production, because most potatoes are planted on dryland or semi-dryland. The lack of modern standardized production and quality control is another obstacle to domestic potato production. The industry is still dominated by very small producers often using marginal land. Farmers find grains or cash crops, such as vegetables or cotton, still offer better returns and are thus planted on prime land.

In North China, the main potato producing region, potatoes are still grown as a single annual crop harvested in summer or autumn. However, in the South potatoes are increasingly grown in the winter in rotation with other crops. This results in better use of fallow land and allows producers to cash in on opportunities for marketing fresh potatoes during the major producing areas' off season.

Chinese potato breeding has progressed in recent years. Research has mainly focused on preventing disease, improving quality and increasing yields for existing varieties, rather than introducing new varieties. About 30 percent of China's potato area is planted with "virus-free" seed. The industry hopes to raise this to 60 percent in five years. Quality control for seed production remains a problem. China does not have a domestic potato variety which can be used effectively in the production of potato chips and frozen potato products. Breeders have introduced three new varieties from North America that are suitable for these processed products: Shapody, Atlantic and Russet Burbank. However, as already noted, the percentage of total production is still very small.

Processing

About 20-22 percent of China's total potato production is processed. Starch is still the traditional product accounting for over 90 percent of total processed products and domestic potatoes are always the raw material. Most processing plants are located in Inner Mongolia, Heilongjiang, Gansu, Shanxi, Guizhou and Ningxia.

As already noted, potato chip and frozen potato production is still relatively small. There are 20 to 30 plants, including some foreign joint ventures, involved in chips and frozen potato production. Processors have tried, but have found domestic breeds of potatoes unsuitable for producing frozen potato products. The sugar content is too high, which results in a dark color after frying and a less attractive taste. The small and inconsistent size of Chinese potatoes also creates a problem. This makes the French fries in particular less attractive to consumers, and it also increases processing costs.

As with potato production, the Chinese industry has high hopes to increase processing amounts in the future. The quality of processed products has improved gradually. More and more large companies are signing procurement contracts with farmers or with local agricultural bureaus to guarantee required processing quality. Some of them have their own production bases to produce potato seed for farmers.

Consumption

Fresh potato consumption accounts for almost 50 percent of China's total. Starch use accounts for 20 percent, feed 15 percent, seed about 6 percent. (Seed potatoes are included in the ending stock number in the potato PSD.) Consumption of chips, frozen fries, powder, flakes and high quality starch is expected to continue to increase in the future, because economic growth is generating strong demand for a variety of convenience and snack food products. Still these currently account for under 5 percent of total consumption.

Most opportunities for frozen potato products, particularly French fries, lie in the restaurant sector. The strong growth of American fast food chains in China will continue to keep the consumption of frozen fries strong, especially among the younger generation in large cities and coastal areas where the economy is stronger. For fresh consumption, traditional pan-fried or boiled potatoes are being replaced, to some extent, by micro-waved or baked potatoes. The majority of this market is still satisfied through imports, although domestic producers have hopes of improving their share.

This year, the hotel and restaurant business in some places has been severely affected by the outbreak of severe acute respiratory syndrome (SARS) in China. The pace of economic growth in general is also expected to slow on account of SARS. Fast food chains fared better, and as the summer progresses, business in restaurants is beginning to return normal levels. Therefore, in general, the impact of SARS on potato consumption is not expected to be that substantial.

Trade

Imports

Frozen potato imports account for 70 percent of all potato imports. These were up 5 percent in 2002 as compared to 2001. This was good growth but well off the pace of previous years. The market

seems to have matured to a degree and domestic production may be eating into imports. In the first quarter of 2003, imports of frozen potato products seem to be growing at the same rate as in 2002. However, concerns about SARS could well dampen growth through the middle part of 2003.

The United States is the largest exporter of frozen potato products to China. However, the U.S. share of the Chinese market shrank from 96 percent in CY 2001 to 86 percent in CY 2002. New Zealand, in particular, is offering stiff competition as prices have dropped. Despite New Zealand's gains, the U.S. is expected to continue to be, by far, the largest supplier of frozen potato products to China for several years to come. As noted in the production section, the domestic industry also hopes to capture a much bigger share of this market, but for the near future it should continue to be dominated by imports.

As of June 1, 2003, it is no longer required to obtain a Chinese Quarantine Import Inspection Permit before some imported processed potato products. These products including potato starch (HS Code 1108.1300) and frozen potato fries (HS Code 2004.1000), however, still undergo inspection upon arrival and must to be accompanied by a USDA, Agricultural Marketing Service, Certificate of Quality and Condition. This marks the first group of agricultural products for which this quarantine import permit requirement has been waived.

Exports

China's potato product exports have increased sharply recently. Fresh potatoes account for well over 80 percent of total exports. The main destinations are Southeast Asian countries and Mongolia. As prices remain favorable for fresh potatoes in these countries, the growth in China's potato exports is expected to continue in 2003.

| | | | | | | |
|----------------------|----------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| PSD Table | | | | | | |
| Country | China, Peoples Republic of | | | | | |
| Commodity | Frozen Potato Products | | | | (MT)(MT, Net Weight) | |
| | 2001 | Revised | 2002 | Estimate | 2003 | Forecast |
| | USDA Official [Old] | Post Estimate [New] | USDA Official [Old] | Post Estimate [New] | USDA Official [Old] | Post Estimate [New] |
| Market Year Begin | | 01/2002 | | 01/2003 | | 01/2004 |
| Deliv. To Processors | 0 | 20000 | 0 | 25000 | 0 | 27000 |
| Beginning Stocks | 0 | 0 | 0 | 0 | 0 | 0 |
| Production | 0 | 8000 | 0 | 10000 | 0 | 11000 |
| Imports | 0 | 49517 | 0 | 51958 | 0 | 52000 |
| TOTAL SUPPLY | 0 | 57517 | 0 | 61958 | 0 | 63000 |
| Exports | 0 | 4569 | 0 | 4736 | 0 | 4800 |
| Domestic Consumption | 0 | 52948 | 0 | 57222 | 0 | 58200 |
| Ending Stocks | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL DISTRIBUTION | 0 | 57517 | 0 | 61958 | 0 | 63000 |

| | | | | | | |
|------------------------|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| PSD Table | | | | | | |
| Country | China, Peoples Republic of | | | | | |
| Commodity | Fresh Potatoes | | | | (HA)(1000 MT) | |
| | 2001 | Revised | 2002 | Estimate | 2003 | Forecast |
| | USDA Official[Old] | Post Estimate[New] | USDA Official[Old] | Post Estimate[New] | USDA Official[Old] | Post Estimate[New] |
| Market Year Begin | | 01/2002 | | 01/2003 | | 01/2004 |
| Area Planted | 0 | 4718800 | 0 | 4813176 | 0 | 4909440 |
| Area Harvested | 0 | 4718800 | 0 | 4813176 | 0 | 4923879 |
| Beginning Stocks | 0 | 795 | 0 | 3942 | 0 | 7110 |
| Production, Commercial | 0 | 64564 | 0 | 65844 | 0 | 67259 |
| Imports | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL SUPPLY | 0 | 65359 | 0 | 69786 | 0 | 74369 |
| Exports, Fresh | 0 | 125 | 0 | 175 | 0 | 200 |
| Processing | 0 | 14204 | 0 | 14485 | 0 | 14460 |
| Domestic Fresh Market | 0 | 32239 | 0 | 32872 | 0 | 32259 |
| Feed Waste | 0 | 14849 | 0 | 15144 | 0 | 15470 |
| TOTAL Dom. Consumption | 0 | 61292 | 0 | 62501 | 0 | 62189 |
| Ending Stocks | 0 | 3942 | 0 | 7110 | 0 | 11980 |
| TOTAL DISTRIBUTION | 0 | 65359 | 0 | 69786 | 0 | 74369 |

China's Potato Production by Province

| | 2000 | | | 2001 | | |
|----------------|---------|------------|-------|---------|------------|-------|
| | Area | Production | Yield | Area | Production | Yield |
| | 1000 Ha | 1000 MT | MT/HA | 1000 Ha | 1000 MT | MT/HA |
| NATIONAL | 4,723 | 66,282 | 14.03 | 4,719 | 64,564 | 13.68 |
| Hebei | 212 | 1360 | 6.43 | 181 | 1275 | 7 |
| Shanxi | 322 | 3520 | 10.94 | 295 | 1829 | 6.2 |
| Inner Mongolia | 646 | 9170 | 14.19 | 562 | 5345 | 9.5 |
| Heilongjiang | 390 | 4045 | 10.38 | 421 | 6165 | 13 |
| Shandong | 115 | 3795 | 33 | 127 | 3795 | 29.8 |
| Hubei | 231 | 3470 | 15 | 237 | 3880 | 16.3 |
| Chongqing | 309 | 4155 | 13.45 | 302 | 3925 | 13 |
| Sichuan | 304 | 4610 | 15.19 | 310 | 4905 | 15.8 |
| Guizhou | 478 | 6230 | 13.05 | 495 | 6405 | 12.9 |
| Yunnan | 317 | 5365 | 16.93 | 388 | 5930 | 15.7 |
| Shaanxi | 305 | 3605 | 11.84 | 262 | 2560 | 9.8 |
| Gansu | 417 | 5250 | 12.59 | 483 | 7325 | 15.2 |

| CHINA'S MONTHLY POTATO IMPORTS | | | | |
|--------------------------------|--------|------------|-------------------|-----------|
| Unit: Metric Tons, USD | | | | |
| | 2002 | | 2003 (Thru March) | |
| | Volume | Value | Volume | Value |
| Potato Seed | 1 | 5,795 | 0 | 0 |
| Other Fresh Potato | 29 | 29,222 | 0 | 171 |
| Frozen Potato | 43 | 65,068 | 0 | 0 |
| | | | | |
| Potato Flake, Granules, Pellet | 205 | 238,170 | 15 | 16,363 |
| Potato Flour, Meal, Powder | 1,738 | 1,387,467 | 532 | 427,574 |
| Potato Starch | 20,035 | 8,081,720 | 5,837 | 2,247,086 |
| | | | | |
| Frozen Potato Fries | 51,958 | 37,680,741 | 13,580 | 9,705,718 |
| Dehydrated Potato | 936 | 2,438,008 | 211 | 319,853 |
| Source: Chinese Customs | | | | |

| CHINA'S MONTHLY POTATO EXPORTS | | | | |
|--------------------------------|---------|------------|-------------------|-----------|
| Unit: Metric Tons, USD | | | | |
| | 2002 | | 2003 (Thru March) | |
| | Volume | Value | Volume | Value |
| Potato Seed | 176 | 65,586 | 220 | 29,424 |
| Other Fresh Potato | 123,635 | 13,658,791 | 18,649 | 2,152,455 |
| Frozen Potato | 1,567 | 884,185 | 397 | 189,580 |
| | | | | |
| Potato Flake, Granules, Pellet | 511 | 426,511 | 554 | 418,711 |
| Potato Flour, Meal, Powder | 365 | 143,228 | 80 | 37,469 |
| Potato Starch | 5,560 | 2,643,398 | 1,072 | 533,464 |
| | | | | |
| Frozen Potato Fries | 4,736 | 3,957,975 | 1,321 | 1,131,979 |
| Dehydrated Potato | 405 | 646,457 | 192 | 235,624 |
| Source: Chinese Customs | | | | |

| CHINA QUARTERLY POTATO STARCH IMPORTS BY ORIGIN, 2002 (Metric Tons) | | | | | |
|--|---------|---------|---------|---------|--------|
| COUNTRY | Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec | TOTAL |
| Netherlands | 1,838 | 2,321 | 2,704 | 3,660 | 10,523 |
| Germany | 867 | 1,098 | 738 | 2,334 | 5,037 |
| Denmark | 502 | 509 | 793 | 464 | 2,268 |
| Poland | 21 | 105 | 210 | 1,398 | 1,734 |
| France | 0 | 0 | 0 | 200 | 200 |
| Japan | 18 | 49 | 79 | 48 | 194 |
| United States | 6 | 20 | 0 | 4 | 30 |
| Other | 16 | 10 | 1 | 22 | 49 |
| TOTAL | 3,268 | 4,112 | 4,525 | 8,130 | 20,035 |
| Source: Chinese Customs | | | | | |
| HS Code: 1108.1300 | | | | | |

| CHINA QUARTERLY POTATO STARCH IMPORTS BY ORIGIN, 2003 (Metric Tons) | | | | | |
|--|---------|---------|---------|---------|-------|
| COUNTRY | Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec | TOTAL |
| Germany | 2,285 | | | | 2,285 |
| Netherlands | 2,045 | | | | 2,045 |
| Denmark | 768 | | | | 768 |
| Poland | 483 | | | | 483 |
| France | 160 | | | | 160 |
| Japan | 84 | | | | 84 |
| United States | 0 | | | | 0 |
| Other | 12 | | | | 12 |
| TOTAL | 5,837 | | | | 5,837 |
| Source: Chinese Customs | | | | | |
| HS Code: 1108.1300 | | | | | |

| CHINA QUARTERLY FROZEN POTATO FRY IMPORTS BY ORIGIN, 2002 (Metric Tons) | | | | | |
|--|---------|---------|---------|---------|--------|
| COUNTRY | Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec | TOTAL |
| United States | 10,132 | 11,220 | 13,939 | 9,393 | 44,684 |
| New Zealand | 807 | 1,866 | 1,181 | 985 | 4,839 |
| Canada | 95 | 478 | 198 | 121 | 892 |
| Netherlands | 44 | 0 | 0 | 708 | 752 |
| Belgium | 109 | 153 | 161 | 226 | 649 |
| Australia | 127 | 0 | 0 | 0 | 127 |
| Other | 3 | 12 | 0 | 0 | 15 |
| TOTAL | 11,317 | 13,729 | 15,479 | 11,433 | 51,958 |
| Source: Chinese Customs | | | | | |
| HS Code: 2004.1000 | | | | | |

| CHINA QUARTERLY FROZEN POTATO FRY IMPORTS BY ORIGIN, 2003 (Metric Tons) | | | | | |
|--|---------|---------|---------|---------|--------|
| COUNTRY | Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec | TOTAL |
| United States | 11,246 | | | | 11,246 |
| New Zealand | 1,444 | | | | 1,444 |
| Canada | 389 | | | | 389 |
| Netherlands | 322 | | | | 322 |
| Belgium | 169 | | | | 169 |
| Other | 10 | | | | 10 |
| TOTAL | 13,580 | | | | 13,580 |
| Source: Chinese Customs | | | | | |
| HS Code: 2004.1000 | | | | | |

| CHINA QUARTERLY POTATO FLOUR IMPORTS BY ORIGIN, 2002 (Metric Tons) | | | | | |
|---|---------|---------|---------|---------|-------|
| COUNTRY | Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec | TOTAL |
| United States | 207 | 89 | 371 | 100 | 767 |
| Germany | 160 | 80 | 20 | 296 | 556 |
| Netherlands | 0 | 160 | 38 | 0 | 198 |
| Poland | 85 | 0 | 21 | 0 | 106 |
| Denmark | 24 | 8 | 23 | 10 | 65 |
| Canada | 20 | 0 | 20 | 0 | 40 |
| Other | 1 | 5 | 0 | 0 | 6 |
| TOTAL | 497 | 342 | 493 | 406 | 1,738 |
| Source: Chinese Customs | | | | | |
| HS Code: 1105.1000 | | | | | |

| CHINA QUARTERLY POTATO FLOUR IMPORTS BY ORIGIN, 2003 (Metric Tons) | | | | | |
|---|---------|---------|---------|---------|-------|
| COUNTRY | Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec | TOTAL |
| Germany | 240 | | | | 240 |
| Netherlands | 151 | | | | 151 |
| United States | 120 | | | | 120 |
| Denmark | 18 | | | | 18 |
| Other | 3 | | | | 3 |
| TOTAL | 532 | | | | 532 |
| Source: Chinese Customs | | | | | |
| HS Code: 1105.1000 | | | | | |

| CHINA QUARTERLY OTHER FRESH POTATO EXPORTS BY DESTINATION, 2002 | | | | | |
|---|---------|---------|---------|---------|---------|
| (Metric Tons) | | | | | |
| COUNTRY | Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec | TOTAL |
| Malaysia | 3,699 | 10,403 | 15,092 | 12,733 | 41,927 |
| Mongolia | 5,612 | 11,287 | 6,815 | 7,383 | 31,097 |
| Vietnam | 0 | 100 | 6,978 | 13,837 | 20,915 |
| Singapore | 3,887 | 3,507 | 2,725 | 5,658 | 15,777 |
| Russia | 19 | 1,183 | 3,903 | 48 | 5,153 |
| Indonesia | 1,344 | 1,772 | 78 | 236 | 3,430 |
| Sri Lanka | 0 | 386 | 388 | 342 | 1,116 |
| Thailand | 0 | 49 | 770 | 260 | 1,079 |
| Hong Kong | 77 | 83 | 383 | 377 | 920 |
| Brunei | 309 | 77 | 264 | 233 | 883 |
| Philippines | 0 | 22 | 340 | 0 | 362 |
| Burma | 63 | 11 | 55 | 158 | 287 |
| North Korea | 3 | 0 | 0 | 200 | 203 |
| Japan | 49 | 0 | 54 | 17 | 120 |
| Other | 98 | 130 | 20 | 118 | 366 |
| TOTAL | 15,160 | 29,010 | 37,865 | 41,600 | 123,635 |
| Source: Chinese Customs | | | | | |
| HS Code: 0701.9000 | | | | | |

| CHINA QUARTERLY OTHER FRESH POTATO EXPORTS BY DESTINATION, 2003 | | | | | |
|---|---------|---------|---------|---------|--------|
| (Metric Tons) | | | | | |
| COUNTRY | Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec | TOTAL |
| Malaysia | 7,238 | | | | 7,238 |
| Mongolia | 6,880 | | | | 6,880 |
| Singapore | 2,933 | | | | 2,933 |
| Hong Kong | 702 | | | | 702 |
| Indonesia | 311 | | | | 311 |
| Brunei | 172 | | | | 172 |
| Vietnam | 140 | | | | 140 |
| Russia | 96 | | | | 96 |
| Other | 177 | | | | 177 |
| TOTAL | 18,649 | | | | 18,649 |
| Source: Chinese Customs | | | | | |
| HS Code: 0701.9000 | | | | | |

| CHINA QUARTERLY POTATO STARCH EXPORTS BY DESTINATION, 2002 (Metric Tons) | | | | | |
|---|---------|---------|---------|---------|-------|
| COUNTRY | Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec | TOTAL |
| South Korea | 1,099 | 1,694 | 1,071 | 949 | 4,813 |
| Taiwan | 20 | 159 | 120 | 80 | 379 |
| Thailand | 0 | 60 | 60 | 0 | 120 |
| Japan | 0 | 100 | 0 | 19 | 119 |
| Hong Kong | 1 | 1 | 15 | 27 | 44 |
| North Korea | 20 | 8 | 0 | 0 | 28 |
| United States | 1 | 0 | 3 | 0 | 4 |
| Other | 1 | 1 | 5 | 46 | 53 |
| TOTAL | 1,142 | 2,023 | 1,274 | 1,121 | 5,560 |
| Source: Chinese Customs HS Code: 1108.1300 | | | | | |

| CHINA QUARTERLY POTATO STARCH EXPORTS BY DESTINATION, 2003 (Metric Tons) | | | | | |
|---|---------|---------|---------|---------|-------|
| COUNTRY | Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec | TOTAL |
| South Korea | 1,023 | | | | 1,023 |
| Taiwan | 40 | | | | 40 |
| United States | 0 | | | | 0 |
| Other | 9 | | | | 9 |
| TOTAL | 1,072 | | | | 1,072 |
| Source: Chinese Customs HS Code: 1108.1300 | | | | | |