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favorable international economic climate in 2000 contributed significantly to the country's boom. The increase in international demand greatly stimulated China's exports. The improved macroeconomic situation accelerated China's agricultural and food sector development in 2000. As a result of the agricultural structural adjustment strategy, grain production was 462.2 million tons, a 9 percent decrease since 1999. Meat and fishery production increased to 61.2 million and 42.8 million tons in 2000, up by 5.2 percent and 3.8 percent, respectively.

With an oversupply of most of its agricultural products, China will continue to readjust agricultural structure in 2001 and the coming years. Greater emphasis will be placed on the improvement of product quality and the development of agricultural product processing. Grain, meat, and fishery products are projected to be about 450 million tons, 65 million tons, and 45 million tons in 2001, respectively. Projected production totals for these products will be up 5 percent, 4 percent, and 4 percent in 2002, respectively. The market situation of most agricultural products is projected to improve.

## **Macroeconomic Situation and Outlook**

Once China substantially had rid itself of the influence of the Asian financial crisis, the national economy began to reverse its downturn. In 2000, the growth rate increased, and GDP reached 8,940.4 billion yuan (US\$1,079 billion), breaking through the US\$1,000 billion mark for the first time. This was an increase of 8 percent over the GDP figure for the previous year. The value of China's overall import and export volume reached US\$474.3 billion, or an increase of 31.5 percent over the previous year, with exports accounting for US\$249.2 billion. Imports grew by 35.8 percent, while exports were up by 27.8 percent. At the end of 2000, foreign exchange reserves reached US\$165.6 billion, an increase of US\$10.9 billion over those at the beginning of 2000.

There was a marked reduction in losses and an increase in profits in state-owned enterprises (SOEs). The objective of reforming largeand medium-sized SOEs and turning around loss-generating operations within three years was essentially attained. The sales/production ratio of industrial products reached 97.7 percent in 2000, which was 0.5 percentage point higher than it was in 1999. The consumer price index, the key barometer for inflation, inched up by 0.4 percent in 2000, indicating that the economy has moved out of the deflation that began in late 1997.

Disposable income per urban resident came to 6,280 yuan (US\$758) in 2000, or an increase of 6.4 percent over the previous year, in real terms; the net income per rural resident reached 2,253 yuan (US\$272) in 2000, or a growth of 2.1 percent over the previous year, in real terms. More than 10 million people in rural areas who had fallen below the poverty line are now out of poverty.

However, many problems still exist in the country's economic life. These include an inefficient industrial structure, uneven economic development among different regions, the shortage of some important resources, increasing employment pressure, and slow income rises for some residents.

A proactive fiscal policy and stable monetary policy will continue in 2001. The domestic economy should have brighter prospects, mainly because of the state's continuing active fiscal policy, which should increase farmers' income and raise the pay of employees of the government and state-owned enterprises. The gross domestic product (GDP) is expected to grow 7.7 percent. The growth in direct investment this year will be higher than or equal to that of 2000, which stood at 9.3 percent. But the growth in exports is expected to drop to about 10 percent, due to reduced use of export tax rebates and continued high oil prices. As a result of wage increases, gradual completion of a social security system, and the perpetuation of preferential policies for housing and tourist development, China's markets will be more robust than they were in 2000. Consumer demand is expected to grow 9 percent in 2001. These favorable factors will have a dynamic impact on the performance of the food and agricultural sector in the future.

## **Food Prices and Consumption**

In 2000, food prices declined by 2.5 percent. The prices of all agricultural products, except fishery products and vegetables, have dropped.

The price changes varied for different food products. The price of meat and meat products suffered a drop of 3 percent, egg prices were down by 8.1 percent. Grain prices declined by 9.9 percent. Prices for fishery products and fresh vegetables were up by 2.7 percent and 5.3 percent, respectively.

With faster income growth among urban residents in 2000 and the improved economic prospects for 2001, food prices are expected to show some change in 2001. As of January 2001, the price of grain was up by 1.6 percent compared with January 2000, rice by 1.5 percent, maize by 9.6 percent, soybeans by 3.5 percent, meat and eggs by 2.2 percent, fishery products by 6.4 percent, fruit by 4.3 percent, and vegetables by 9 percent.

Food accounts for a large percentage of consumer spending in China. In 2000, the Engel's coefficient (the proportion of food expenditure out of total consumption expenditure) of urban residents was about 40 percent. The Engel's coefficient of rural residents was about 50 percent. As living standards improve, people pay more attention to their diet. In 2000, the country's per capita meat consumption stood at 17 kilograms, and fishery products were 6.5 kilograms. The consumption of oil and eggs also increased.

Policy factors will play an important role in expanding domestic food demand in 2001-2002. The government has already announced consumption-boosting, weeklong May Day and National Day holidays. The central government will also take other measures, such as

increasing salaries, providing compensation for laid-off workers, and increasing pensions, to encourage spending.

# Food Processing and Marketing

Because development of the food-processing industry can significantly increase farmers' income, the Chinese government has paid more attention to development of this sector. Food processing has grown as the agricultural sector has developed and China's urbanization has accelerated. China has more than 70,000 food-processing enterprises. The food industry had a turnover of about US\$80 billion in 2000, and is expected to grow at the rate 10 percent in 2001-2002.

Most of China's food enterprises are small and unautomated, with some using imported machines made in the 1980s. To produce more high-quality processed food, restructuring of the food industry will be required. The country's entry into the WTO will significantly help the development of China's food industry. After China reduces its tariffs, foreign capital, advanced technology, and management expertise will flood in; these will greatly encourage China's food companies to change their ways and adopt market practices. Of course, most small companies without specialized products will be eliminated from the market. Private food companies will play an increasingly important role in the food industry.

To enable Chinese people to obtain quality food conveniently, the government will continue to expand its supply of new food and beverage products, and focus on developing takeout and other convenience foods in the coming years. It will establish many more new urban food markets and supermarkets.

## **Agricultural Production and Trade**

Structural adjustment is a major feature of agricultural production in China. In 2000, China's grain output decreased by 9 percent; the decline was partly due to a drought and partly to market readjustment. In early 2000, the central government instructed provincial agricultural departments to reduce the output of corn, wheat, rice, and other crops. The area of grain planted was about 106 million hectares, reduced by some 3.1 million hectares from 1999.

Production totals for 2000 include sugar, 76.4 million tons, down by 8.4 percent from 1999; oilseeds, 29.5 million tons, up by 13.4 percent; and fruits, 62.3 million tons, down by 0.2 percent. The planted area of vegetables reached 14.7 million hectares, an increase of 10.1 percent compared with 1999.

With oversupply and structural adjustment of agriculture continuing in China, it is projected that grain production will decline further in 2001. Major reductions in production are planned for maize, spring wheat, beans, and rice. The production of oilseeds and vegetables will continue to grow. Fruits are expected to be stable in 2001. Based on a recent nationwide survey, it is projected that the planted areas of rice and beans will fall 2.5 percent and 0.5 percent, but that oilseeds and yams will increase by 1.6 percent and 3.1 percent, respectively. The planted areas of sugarcane and vegetables will also increase. Meat production and fishery products are projected to increase as indicated at the beginning of this report.

As the growth of China's foreign trade accelerated in 2000, its agricultural trade also increased. China's exports of foodstuffs and major livestock products were US\$12.3 billion, up by 17.5 percent from 1999. Imports of these products totaled US\$4.76 billion, up 31.5 percent from 1999. Beverage and tobacco exports totaled US\$745 million, down by 5.4 percent from 1999. Imports of these products totaled US\$364 million, up by 75.2 percent from 1999. Exports of plant oil, animal fat, and wax totaled US\$116 million, down by 11.7 percent from 1999. Imports of these products totaled US\$976 million, down 28.6 percent from 1999.

In 2001, the growth rate of Chinese agricultural exports will increase with the corresponding progress of quality improvement. Imports of agricultural products are more likely to increase with growth in domestic needs.

## Food and Agricultural Policy

As China's economic development enters a new stage of structural adjustment in the coming years, the government will continue to put agricultural reform at the top of its agenda. To reform the agricultural sector, the Chinese government will return a number of cultivated fields to their natural state, upgrade the quality of farm produce, and apply high technology to food processing, storage, preservation, and transportation.

To readjust the crop-growing structure to match market demands, China will lower prices for low-quality agricultural products with the aim of encouraging the cultivation of top-quality produce and optimizing the agricultural production structure, especially the grain planting structure.

While effectively protecting cultivated land and stabilizing grain production capacities, China will focus on improving crop strains, crop quality, and economic returns. Great efforts will be made to promote the industrial management of agricultural production, to support leading enterprises, and to spread the practices of farmers working with companies or producing crops on a contract basis.

In the coming years, China's food and agricultural policy will focus on:

**DEVELOPING ORGANIC FOOD.** With rising incomes and heightened awareness of the link between diet and health, more and more people are willing to pay higher prices for organic food. As a key part of the restructuring of China's agricultural economic sector, the organic food industry will be promoted. Organic foods are grown without the use of chemical fertilizers and pesticides. China has more than a thousand enterprises that have been registered to sell organic food as of the end of 2000. These enterprises have already produced at least 10 million tons and exported more than USS200 million worth of products. The Chinese government will further support the development of these enterprises in the coming year, including in the areas of rice and wheat. **CARRYING ON THE SEED PROJECT.** As one part of the seed project, in

the Tenth Five-Year Plan (2001-2005), China will continue to import high quality seeds, as well as technology and equipment, to meet growing market demand. During the Ninth Five-Year Plan (1996-2000), the government had developed many kinds of high quality seed, and had upgraded major seed types, including wheat, maize, rice, sugar, and edible oil. In 2002, the government will closely oversee the country's various seed companies, and will discipline those who try to sell inferior products. The government will also increase its investment in seed research, development, and production.

**GUARANTEEING FOOD SAFETY.** In a world shocked by recent food catastrophes, such as mad cow disease and foot-and-mouth disease, the Chinese government takes seriously its responsibility to improve food safety and protect the health of its people. The government is implementing safety and quality controls for farm produce in both farming areas and city markets. Under the new system, stricter quality controls for farm products like vegetables and grains will be introduced to make sure they are pollution-free when they reach the market. In the meantime, the government will increase the scope of quality examinations, and will ask all suppliers to comply with laws such as the Food Health Law, the Managerial Regulations on Healthcare Products, and so forth.

**STARTING AN AGRICULTURAL SCIENCE AND TECHNOLOGY REVOLUTION.** China has set for itself the goal of making its agricultural science and technology to be among the best in the world within three decades. In 2000, science and technology contributed 42 percent of the increase in the country's farm production, nearly half of the growth in the animal husbandry sector, and 27.3 percent for that in forestry. In China, the development of agricultural technology will ensure that the country has enough grain, while at the same time supporting the exploration of resources, environmental protection, and the sustainable growth of the agricultural sector. The government is committed to establishing an efficient research and development system, perfecting a system for increasing the use of farm technology and increasing investment in research.

### **China's Water Resources and Water Management**

China often suffers from natural disasters related to water. Because the effective management of its water resources is critical to China's prosperity, China has implemented a sustainable water resources strategy. Greater attention will be paid, to the treatment of large rivers and lakes, irrigation and drainage, rural and urban water supply, and water environmental protection.

**WATER RESOURCES.** China has a total water surface run-off—the rainfall carried off by streams and rivers—of 2,700 billion cubic meters a year. In China, there are little more than 2,200 cubic meters of water per person, only one-quarter of the world average, each year.

China is disadvantaged by uneven water distribution. Surveys show that 62 percent of China's farmland is located in areas where the annual surface run-off is less than 18 percent of the total. Also, 85 percent of the rainfall in northern China and 70 percent in the south falls in the summer, between June and September. Most parts of northwest China, including Xinjiang, Ningxia, Inner Mongolia, Qinghai, Gansu, and Shaanxi, are drought-prone and short of water resources. With a population of 90 million, inland northwest China covers 3.04 million square kilometers, about 30 percent of the total land area in China, while its water resources account for only 10 percent of the nation's total.

**WATER USE.** In recent years, the Chinese have found that water supply is falling behind demand as industry and cities grow and agriculture struggles to keep up with a population near 1.3 billion. There is an annual gap of 30 to 40 billion cubic meters between water supply and domestic demand. The annual water consumption for urban areas is about 30 billion cubic meters a year. Only 14 percent of urban wastewater is now treated and recycled. While China's urban water supply capacity grows by 7 percent annually, demand goes up by 10 percent. More than 400 out of the country's 668 cities are suffering water shortages.

Annual water consumption for farming has remained around 400 billion cubic meters a year. Farming irrigation accounts for more than 70 percent of China's total water use. Efficiency of water use in the agriculture sector is less than 50 percent. More than 24 million of the rural population, 20 million hectares of farmland, and 93 million hectares of pasture are in desperate need of water.

China's industries consume 90 billion cubic meters of water each year, of which only 50 percent is recycled.

**ECONOMIC IMPACTS OF WATER SCARCITY.** Water shortages cause economic losses estimated at more than 120 billion yuan (US\$14.5 billion) annually. In 2000, most of northern China and part of southern China suffered severe drought, which hit 29 provinces and autonomous regions, destroyed 1 million hectares of farmland, and caused 300,000 tons in lost grain.

**SAVING WATER.** Since 70 percent of the annual precipitation falls in the four-month-long rainy season in the northwest, China has decided to build more rainfall-collection projects to ease water crises. By the end of 2000, half of China's provinces and autonomous regions had started rainwater-collection projects, which benefited 23.8 million people and provided irrigation for 1.5 million hectares of land.

In 2000, some major water-saving measures, including planned water use, water rationing, and charges for excess consumption, were put into effect throughout China. Some cities installed newly developed water-saving taps, both in homes and in public places. **CONTROLLING WATER POLLUTION.** China has made it a national policy to urge rational use and protection of water resources. Since the 1980s, the Chinese government has issued four laws and 100 decrees concerning water. These include the water law, the law on soil and water conservation, the law on flood control and the marine environmental protection law. Nationwide, many more decrees and regulations protecting water resources have been issued by local governments.

Since China began a round of special measures to protect the environment, it has controlled the pollution in Yunnan Province's

Dianchi Lake and in Chaohu Lake in Anhui Province. The Chinese government has taken active measures to avoid polluting the Lancang-Mekong River (known as "The Danube of the East"), an important waterway in Southeast Asia, while also conducting water resource development projects on the upper reaches of the river.

To protect water resources, the government will continue to shut down factories having levels of high water consumption and pollution, including certain electric power, steel, and paper manufacturing facilities. China will regularly release water resource quality reports for large- and medium-sized cities. China will also highlight research on the development of advanced technology, especially in the bioengineering sphere, to treat water pollution. China will also apply modern technologies, like a computer-based information network, to set up monitoring and management systems for managing water quality in major rivers and lakes.

**THE TENTH FIVE-YEAR PLAN.** The Chinese government will make an effort to solve water supply shortages and reduce water pollution during 2001-05. Details include the following:

• Continue to spend more on constructing water-control facilities.

- Urge farmers to modernize irrigation with the use of water-saving techniques. Advanced water-saving technology and other highly efficient agricultural techniques will be introduced to the animal-breeding sector.
- Charge reasonable prices for water used by industries and urban homes. Different prices of water will be set for different users and trades based on the source of the water, its quality, and amount.
- Build sewage treatment plants throughout urban areas, while controlling water pollution caused by farming and industries. A countrywide water quality environmental information network and a public information center on environment protection will

be established. Daily reporting of environmental quality will be improved and environmental forecasts will be instituted in some cities.

- Reform the water management approach. Water-use rights, once solely owned by the state, will be bought and sold. Private companies or individuals may share water-use rights with state-owned counterparts, most likely in the form of holding equities.
- Allow foreign investors to pump money into the water infrastructure. China will import advanced water treatment technology and new management structures.

**THE SOUTH-TO-NORTH WATER DIVERSION PROJECT.** Plagued by flooding in the south and drought in the north, China hopes to optimize its water resources with the help of an integrated national network of water distribution systems. China is accelerating preparations for the largest water diversion project in its history: the channeling of water from the Yangtze River to the drought-prone north.

The project includes three lines: for the east line, water from the Yangtze will be lifted up through the Grand Canal to the northern parts of Jiangsu, Anhui, and Shandong provinces and then to the north of the Yellow River. The middle line will transfer water from the central section of the Yangtze in Sichuan or Hubei Province to North China via Henan Province. The west line will connect the Tongtian River, Dadu River, and Yalong River. When the canals are fully completed, they are expected to take 38 to 48 billion cubic meters of water from the Yangtze River annually. About 30 to 35 billion cubic meters of water will be available for industries, urban areas, and irrigation in North China.

The government will invest an estimated 130 to 150 billion yuan (US\$15.7 to 18.1 billion) in the first two phases of construction, which will include the middle and eastern stretches of the canals, totaling 2,400-kilometers in length.

	Units	1997	1998	1999	2000	2001 <sup></sup>	2002F
INCOME AND FOOD PRICES	onits	1991	1990	1999	2000	2001-	LOOL
INCOME AND FOOD PRICES		000	054	707	750	015	872
Per capita income	US\$/capita	623	654	707	758	815	
% of disposable income spent on food	%	37.6	35.5	31.0	32.0	31.0	30.0
% spent eating out	%	4.0	4.0	4.0	4.2	4.5	5.0
Food price index	1990=100	221.8	204.1	195.5	194.5	196.0	197.2
General price index (CPI)	1990=100	204.2	187.9	185.3	186.0	187.6	190.0
POPULATION							
Total population	Million	1,236.3	1,248.1	1,259.1	1,295.3	1,308.3	1,320.0
Urban	Million	369.9	379.4	388.9	455.9	468.2	481.8
Nonurban	Million	866.4	868.7	870.2	807.4	840.1	838.2
FOOD INFRASTRUCTURE							
Trade capacity							
Grain exports	1,000 Tons	8,330	8,890	7,580	14,000	8,400	na
Grain imports	1,000 Tons	4,170	3,880	7,720	13,570	5,000	na
Total food and agricultural trade	Million US\$	26,960	22,170	21,750	22,300	25,000	26,500
Total food and agricultural exports	Million US\$	15,160	13,840	13,540	13,250	13,440	13,600
Fishery exports	Million US\$	1,881	1,730	1,940	3,500	3,640	3,700
Total food and agricultural imports	Million USS	11,800	8,330	8,210	9,050	10.060	10,150
Fishery imports	Million USS	na	1.020	1.290	1,500	1.630	1.760
Port capacity	Million Tons	80	92	105	108	111	114
Road access	1.000 Kms	1.226	1.279	1.352	1,384	1.420	1.465
Rail access	1,000 Kms	58	58	58	59	60	61
Telecommunications	1,000 Lines	736	1,577	1,760	2,046	2,230	2,400
ROLE OF AGRICULTURE AND TRADE IN	ΓΗΕ ΕCONOMY						
Agriculture as a share of GNP	%	19.4	18.9	17.6	16.5	16.0	15.4
Self sufficiency in grains	%	100.9	100.5	100.8	100.4	100.1	99.2
MACROECONOMICS INDICATORS							
GDP growth	%	8.8	7.8	7.1	8.0	7.7	7.5
Interest rate	%	5.7 - 7.5	4.8 - 5.2	4.0	4.0 - 4.8	4.0 - 4.5	4.0 - 4.5
Exchange rate	Yuan/US\$	8.29	8.3	8.3	8.3	8.3	8.3

na = not available E = estimate F = forecast

Ind = Inot available L = Glinate I = Inotecce Sources: China Statistics Yearbook, various issues (1996–2000). Customs Statistics Yearbook, various issues (1996–2000). China Rural Statistics Yearbook, various issues (1966–2000).