KOREA

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Summary

The real GDP growth rate remained low at 2.8 percent in 2001. The Korean economy is expected to grow 5-6 percent in 2002. Consumer price is forecasted to increase by 2.5-3.0 percent, much lower than the 4.3 percent rate of 2001. The unemployment rate is expected to remain at 3- 4 percent until 2003. The exchange rate is expected to remain at the level of 1,250 Won until 2003. The World Cup games and presidential election this year could boost the economy to a certain extent. Food prices went up by 3.5 percent in 2001. Food prices are projected to go up by 3 percent in 2002 and by 2.5 percent in 2003. Agricultural GDP is projected to decrease by 3 percent in 2002 and by 2 percent in 2003.

Korea inaugurated the Korea Food and Drug Administration in 1998. The SPS system has been streamlined as imported food tend to pose higher risks than domestic products. The HACCP system was adopted in 1997. Adoption of HACCP is voluntary for food processing firms, except slaughterhouses. Victims of food poisoning increased from 1,584 in 1995 to 7,269 in 2000, and 78 percent of the cases were caused by food provided by a group. Food safety regulations are enforced by the Ministry of Agriculture and Forestry (MAF), the Ministry of Health and Welfare (MHW), and the Ministry of Ocean and Fisheries (MOF). MAF is responsible for plants and livestock at the production stage. MHW is in charge of enforcing the laws for food, except livestock products at the processing stage. MHW is responsible for all food products at the retail stage. Causes of illness from food poisoning were Salmonella (36 percent), Staphylococcus (11.3 percent), Vibrio (3.2 percent) and others (50 percent). Causes of illness by food were meat and processed meat (49 percent), fishery products (12.3 percent), sushi and lunch box (13.3 percent), and others (25.2 percent).

Macroeconomic Situation and Outlook

Korea's external trade accounts for over 70 percent of its GDP. Economic growth is thus heavily dependent on the situation of the world economy. Major economies affecting the Korean economy include the United States, Japan, China, and the European Union. Korea's trade dependency on these major economies is over 60 percent, and comprises 16 percent for Japan, 21 percent for the United States, 13 percent for the EU, and 10 percent for China. Domestic consumption of petroleum wholly relies upon import, and its import bill is over $25 billion a year, accounting for 15 percent of total imports.

As the world economy is expected to be vitalized in the second half of this year, petroleum prices will be stabilized accordingly. Given these favorable external factors, the Korean economy is expected to grow 5-6 percent in 2002. Leading factors that contribute to the growth would be domestic consumption in the first half of the year and the U.S. economy's recovery in the second half. In 2001, major manufacturing sectors in the country suffered from a sharp decrease in export and investment. The real GDP growth rate remained low at 2.8 percent. The major contributor to the growth was domestic consumption.

With a strong recovery from the foreign exchange crisis, Korea achieved a remarkable trade growth in 2000. Both export and import grew—by 20 percent and 34 percent, respectively. However, exports decreased by 13 percent in 2001 mainly because of slowing economic activities in the United States and Japan. A complete fall in semi-conductor price was a major contributor to the reduced export. Export is forecasted to increase by over 10 percent in 2002. The semi-conductor industry is expected to grow with increasing demand and price. Korea's trade balance will stay in the black with a $5 billion surplus in 2002.

Investment from the private sector is also expected to increase, contributing to the recovery of the economy and reduced uncertainty. Consumer price is forecasted to increase by 2.5-3.0 percent, much lower than the 4.3 percent of 2001. In the same period, the unemployment rate went down to 3.7 percent from 4.2 percent. The unemployment rate is expected to remain at 3-4 percent until 2003. Relatively high interest rates and positive prospects for the stock market will attract more foreign investors into the domestic market. The annual average stock market index rose to the 900 level from a 500 level at the beginning of 2001. It is expected to resume its stability and go up further to 1,000 points in 2002. The exchange rate went up from 1,130 Won in 2000 to 1,291 Won in 2001 against the U.S. dollar, a 14-percent depreciation. The Won depreciation resulted from recessions in the United States and Japan as well as the weak Japanese Yen. But the exchange rate is expected to remain at the level of 1,250 Won until 2003.

The World Cup games and presidential election this year could boost the economy to a certain extent. With a success of the World Cup games, Korea may achieve economic growth to 5 percent in 2002 and over 5 percent in 2003. But since elections generally give upward pressure to inflation, higher inflation pressure from the presidential election may dampen sound economic growth. Recent unstable prices of petroleum along with its growing domestic demand may cause cost-push inflation.

Food Prices and Consumption

Food prices went up by 3.5 percent in 2001. Rice and beverage prices declined by 3.2 percent and 1.2 percent, respectively. But prices for livestock products and fruits rose by 8.8 percent and 13.4 percent, respectively, contributing to a food price increase. Food prices are projected to go up by 3 percent in 2002 and by 2.5 percent in 2003. But farm gate prices are projected to decrease by 1.4 percent both in 2002 and 2003. With a widening market opening for agricultural products, an increase in food price has a ceiling or is limited even under the situation of deficient domestic supply.

The consumer price index (CPI) rose by 4.1 percent in 2001. The

CPI is expected to increase by 3.8 percent in 2002 and 3.2 percent in 2003. A relatively reasonable food price increase in food prices is attributable to a moderate increase in the CPI in 2001. A considerable increase in the beef price by 16.9 percent contributed to an increase in meat prices. The FMD and BSE that occurred in the European Union lowered imported beef prices. Prices for pork and poultry meats also increased by 8.5 percent and 12 percent, respectively. The price for dairy products increased by 3.4 percent.

Prices for food away from home will increase beyond those for food at home as the service sector grows. The rate of women participating in the labor market is projected to increase until 2003. Expenditure on food away from home is increasing rapidly and is expected to grow by over 10 percent a year. The share of expenditure on food away from home in total expenditure on food increased from 23 percent in 1990 to 44 percent in 2001. This share will reach nearly 50 percent in 2003. The share of disposable income spent on food is projected to decline from 23.7 percent in 2001 to 23 percent in 2003.

Per-capita caloric intake has remained stable at around 2,950 calories a day since the late 1990s. This figure may not change in the near future. About 15 percent of caloric intake comes from animal products with the remaining 85 percent from plants. The share of protein was relatively constant at around 13 percent of total energy intake. The share of fat, however, increased to 26 percent while carbohydrates declined to 60 percent in 2001. The Protein-Fat-Carbohydrate (P-F-C) balance is becoming too skewed to fat and protein. Reduction in carbohydrates is mainly from the reduction of rice consumption. Rice consumption decreased to 90 kg/person/year, a 4 percent decrease from 2001. The share of protein from animal products increased 5 percentage points in 10 years. Expenditure on food by the commodity group verifies this trend. Expenditure on grain has decreased by 3.7 percent a year. However, expenditures on meat, dairy products, and fruits increased 3.6 percent, 3.1 percent, and 2.7 percent a year, respectively.

Food Processing and Marketing

The food processing sector is a stable, growing industry in Korea. The food processing industry has been relatively stable over the foreign exchange crisis period. Food processing accounts for 7.1 percent of total manufacturing value added and 6.7 percent in employment. Food processors' share in total manufacturing was higher during the crisis of 1998 than before and after the crisis, accounting for 7.23 percent in number of firms, 7.36 percent in employment, and 7.47 percent in value of shipment. Employment by the food processing sector increased moderately from 177,000 in 2000 to 179,000 in 2001. During the crisis period, the number of firms and employment in the manufacturing sector decreased by 14 percent. However, the number of firms and employment in the food processing sector decreased by 6.7 percent and 7.6 percent, respectively. The value of shipment in the food processing sector even increased by 7.7 percent during the same period.

The food processing sector consists of 6,200 firms. The number of food processors is expected to increase to 6,350 by 2003. These firms had value of shipment of $34 billion in 2001. The value of shipment is projected to increase by 5 percent a year until 2003 as household expenditure on processed food increases. Demand for processed food grows with income growth, lifestyle changes, and increased social activity among women. Demand for convenience-food is increasing rapidly among the younger generation and many new suppliers are entering the market. The expenditure share on processed food in total food expenditure increased from 32 percent in 1995 to 36 percent in 2001. Expenditure on processed food is increasing by 4 percent a year.

Improvement of agricultural marketing efficiency is still an important issue. Traditional marketing channels are complicated and additive to marketing margins. As marketing margins go up, demand decreases and farm prices suffer. Both producers and consumers become losers. The Korean government encouraged the simplification of marketing channels. Large-scale retailers, wholesale markets, and direct marketing from producers to consumers are encouraged to play a key role to reduce marketing margins. The role of small-scale retailers and middlemen has decreased. The government distributes more budgets to facilitate competition among various marketing agents to reduce marketing margins.

Agricultural Production and Trade

The number of farm workers was 2.19 million in 2001 and is projected to decrease to 2 million in 2003. Agricultural land also decreased to 1.88 million hectares in 2001. Agricultural land is expected to shrink further to 1.84 million hectares in 2003. With reduced factors of production and unfavorable output prices, the value of agricultural production tends to be stagnant. Agricultural GDP increased 0.4 percent in 2001. The livestock sector experienced a significant reduction in the value of production, a 4.5 percent decrease, because of the reduction of Korean beef cattle. The grain sector gained a 1.2 percent of GDP increase owing to a good harvest of rice. Agricultural GDP is projected to decrease by 3 percent in 2002 and by 2 percent in 2003.

Rice production was 5.16 million metric tons in 2001, a 4 percent increase from 2000. However, it is projected to decrease by 1 to 2 percent a year by 2005. Planted land for rice is also expected to decrease by 40,000 hectares until 2005. A decline in the area cultivated will be a greater factor of shrinking rice production than the reduction of yield. Beef production was reduced to 162 thousand tons in 2001 from 211 thousand tons in 2000. Beef production is projected to decrease rapidly to 153 thousand tons in 2002 and 145 thousand tons in 2003. The import of beef increased to 213 thousand tons and is expected to increase further to 252 thousand tons in 2002 and 270 thousand tons in 2003. Imported beef will represent two-thirds of domestic consumption in 2003. Pork production increased to 766 thousand tons in 2001, a 7 percent increase. Pork production is expected to grow 2.5 percent a year until 2003. If the export of pork to Japan resumes in the near future, pork production will increase more. The production of chicken also increased from 262 thousand tons in 2000 to 277 thousand tons in 2001, a 5.7 percent increase. Chicken production is expected to increase to 290 thousand tons in 2002 and 295 thousand tons in 2003.

Apple production declined rapidly from 716 thousand tons in 1995 to 404 thousand tons in 2001. But it will remain stable at a level of 400 thousand tons for the next few years. Pear production, on the other hand, increased from 178 thousand tons in 1995 to 417 thousand tons in 2001, an increase of 2.3 times. Pear production is expected to increase further to 445 thousand tons in 2003. Grape production decreased to 470 thousand tons in 2001 from 476 thousand tons in 2000. Grape production is projected to decrease to 460 thousand tons in 2003.

Exports of agricultural products were $1.25 billion in 2001, a significant growth of 10.5 percent. Increased exports were from the vegetable and fruits sectors. Fruits export was $56 million, an increase of 24.4 percent. Resumed export to Chinese Taipei was the positive factor for the increase of fruit exports. Exports of fresh vegetables were $190 million, an increase of 2 percent from 2000. Exports of livestock products decreased to $118 million, mainly because of the loss of the Japanese pork market. Agricultural exports are expected to face a low growth rate of 4-5 percent in 2002 and 2003 because of the stagnation of the Japanese economy.

Agricultural imports were $5.3 billion, an increase of 3.9 percent in 2001. Imports of grain increased continuously and went up to $1.55 billion in 2001. Meat imports were reduced to $1.47 billion, a significant reduction of 12.6 percent in 2001, because of the increased awareness of food safety threats such as BSE and MFD. Agricultural imports are expected to increase by 5-6 percent a year in 2002 and 2003.

Food and Agricultural Policy

A 10-year plan of the Rural Structural Improvement Project (1992-2001) was finished last year. Despite the ambitious plan, Korean agriculture still remains at a low level of competitiveness. Implementation of the results of the Uruguay Round enlarged market opening and enforced farmers to adjust farming. For example, the number of beef cattle was reduced to 1.6 million from 2.8 million in 1996. Food security or self-sufficiency of staple foods, especially rice, is the utmost policy goal. Agricultural policy has focused on rice management, and Korea has achieved self-sufficiency in rice.

Policy priorities in 2002 are given to the enhancement of competitiveness in the rice industry, which faces another market opening in 2004. Recent overproduction of rice gives rise to another challenging problem in the agricultural sector. Farmers are encouraged to produce high-quality rice for higher prices. The rice management program by the government faces limitation because of the reduction of domestic support (AMS) and capacity of depot. The government allows market forces to determine rice price gradually. Oversupply inevitably lowers rice prices, thus the government introduces direct payment programs to compensate income losses. Enlargement of direct payment programs for paddy and other upland agriculture become more important.

Recent agricultural policy emphasizes consumer-oriented supply. Consumers' preferences rapidly change to food safety and quality from prices and quantity. Improved sanitation for livestock and sanitary/phyto-sanitary measures also receive high priorities as Korea experienced foot-and-mouth disease in 2000 and 2002, and expects increasing foreign visitors for the World Cup games. The export promotion policy always captures a major goal of the agricultural policy. Exports of fresh vegetables and fruits, mainly to Japan, are directly linked to farm income. Phyto-sanitary measures, standards (Japan Agriculture Standard), and marketing customs in Japan are major obstacles for increasing Korean exports.

Ongoing trade negotiations are currently the most important policy issues. Agricultural negotiations in WTO under the name of the Doha Development Agenda (DDA) have become an important task to the Korean government. Korea's strategy in DDA agricultural negotiations is focused on minimizing the reduction rate of tariffs and the expansion of quotas. Tariff cuts with some formula will give less flexibility in implementation and deeper cuts. Korea prefers to go with the Uruguay Round type tariff reduction method.

Korea's developing country status is another hot issue. Some WTO members privately argue Korea's status of developing country. Their arguments are that Korea is one of the OECD members; exports advanced value-added products such as semi-conductors, automobiles, electronic devices, and so on; earns a per capita GNP of $10,000. However, Korea's agricultural sector is far below the manufacturing sector and still faces rapid structural change. Thus, it deserves to take the premium of developing country status. The Korean government's position on this issue is clear.

Negotiations for the free trade agreement with Chile will resume in July 2002. The negotiation is far behind schedule mainly because of opposition from Korean farmers. Chile is a strong exporter of fruits. Increased Chilean fruits in the Korean market will bring another structural change to the Korean fruit industry. The tariff concession schedule for Korean agricultural products and Chilean manufactured goods will be the key negotiation issues. Korea has also agreed to launch the "Business-Government-Academy Research Forum" with Japan to evaluate the effects of a Korea-Japan free trade agreement. The Korean agricultural sector considers this agreement as a positive one.

Food Safety

Food safety is receiving more attention with the rising incidence of foodborne illness, an increasing concern over potential hazards/risks, and growing food trade. Increasing hazards and risks of foodborne illness are the major factor affecting food safety concern. Food safety concerns increase with diversification of food consumption, increased consumption of processed food, and an increase in cold chain system, GMOs, and agricultural trade. Food safety cannot be guaranteed only by safe cooking at home and safe production on the farm. It depends greatly on the whole food system: production, processing, marketing, and consumption.

With a rising concern about food safety, Korea inaugurated the Korea Food and Drug Administration in 1998 along with the incidence of BSE in Europe, O-157 in imported meat, and GMO issues. Incidents related to food safety that drew public concern are as follows: several cases of contaminated food imported from China such as fishery products with some lead and nails, mushrooms contaminated from pesticides in 2001, Australian beef contaminated with pesticides, contaminated sausages imported from the United States, pork contaminated with dioxin imported from Belgium, U.S. beef contaminated from O-157, and increases in FMD and GMO issues. In 1997, consumers gave special attention to BSE and FMD. Imported food tends to pose higher risks than domestic products.

One survey (conducted in May 2001, with a sample size of 551) shows that major determinants in purchasing meat are safety (40 percent), taste (19 percent), and price (15 percent). For vegetable shopping, consumers consider taste (31 percent) as the most important factor, and then safety (24 percent) and prices (23 percent). In comparing domestic products with imported products in terms of food safety, consumers consider domestic products as safer (86.9 percent). In terms of price, consumers prefer foreign products (40 percent).

The HACCP system was adopted in 1997. Adoption of HACCP is voluntary for food processing firms, except slaughterhouses. The HACCP system became compulsory for slaughterhouses in July 2000, and all slaughterhouses have to be certified by July 2003. The government provides financial support and consulting to slaughterhouses. Thirty-six slaughterhouses were successful in obtaining HACCP certification by 2001. It will be extended to 50 establishments by 2002. In 2002, small-sized slaughterhouses with daily slaughtering capacity of 30-50 head of cattle, 300-500 head of swine and 30,000-50,000 chicken need to obtain HACCP certification. The remaining slaughterhouses have to obtain HACCP in 2003.

For the last 20 years, expenditure on food at home increased 2.2 percent a year and expenditure on food away from home increased 14.1 percent a year. A rapid increase in away-from-home food consumption has become one of the major sources of foodborne illness. Food prepared for a large group of people has become a critical source of foodborne disease. For example, victims of food poisoning increased from 1,584 in 1995 to 7,269 in 2000 and 78 percent of the cases were caused by food provided by a group.

Regulations related to food safety are the Sanitary Regulation on Food, Production and Processing Standards, Law of Quality Control for Agricultural Products, Law of Livestock Processing, Feed Management Law, Pesticide Management Law, Law for Promotion of Environmentally Friendly Products, Regulation for Recall, Regulation for the Rules of Origin, and Labeling Law on GMO. Food safety regulations are controlled by the Ministry of Agriculture and Forestry (MAF), the Ministry of Health and Welfare (MHW), and the Ministry of Ocean and Fisheries (MOF). Provincial governments are also responsible for monitoring food safety regulations. At the production stage, the MAF is responsible for plants and livestock. At the processing stage, the MHW is in charge of enforcing the law for food, except livestock products. At the final stage, the MHW is responsible for all food products. Certification systems related to food safety are Certification on Environmentally Friendly Products, Quality Certification on Processed Food with Organic Products, and HACCP. A labeling system for origin of production and GMO has also been adopted.

Food poisoning victims numbered 7,269 in 2000. Causes of illness were Salmonella (36 percent), Staphylococcus (11.3 percent), Vibrio (3.2 percent), and others (50 percent). Causes of illness by food were meat and processed meat (49 percent), fishery products (12.3 percent), sushi and lunch boxes (13.3 percent), and others (25.2 percent). Meat and meat products are the major cause of food poisoning illness, thus the government is enforcing the compulsory HACCP system for slaughterhouses.

The cost of illness from food poisoning of meat is estimated to be 21 to 37 billion won a year. The cost of medical care is estimated to be 9 to 20 billion won and cost for reduction of productivity is estimated at 12 to 17 billion won. Benefits from reduction of illness from food are estimated at 217 to 378 billion won for 20 years (from 2003 to 2023). Costs to complete HACCP for all of the slaughterhouses are estimated to be 167 billion won. Therefore, implementation of the HACCP system to slaughterhouses is expected to provide net social welfare. In order to reduce foodborne illness and monitor food safety related regulations more efficiently, cooperation among the ministries and between the central and regional governments is required. A growing role or concern by consumer groups is also required to make a better food safety system.

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	Units	1999	2000	2001	2002E	2003E
FOOD CONSUMPTION PATTERNS						
Per capita caloric intake	Cal/day	2,968	2,953	2,960	2,963	2,959
From animal products	Cal/day	442	447	441	441	440.5
From vegetable products	Cal/day	2,526	2,506	2,519	2,522	2,519
Protein (% of calories)	%	13.2	13.1	13.1	13.1	13.1
Fat (% of calories)	%	25	25.5	25.8	26.3	26.7
Carbohydrates (% of calories)	%	61.8	61.4	61.1	60.7	60.4
INCOME AND FOOD PRICES						
Per capita income	US$/capita	8,595	9,770	8,900	9,393	9,546
% of disposable income spent on food	%	27.9	27.4	23.7	23.0	22.6
% spent eating out	%	9.9	10.4	10.4	11.0	11.3
Food price index	2000=100	99.1	100.0	103.5	108.2	110.4
General price index (CPI)	2000=100	97.2	100.0	104.1	108.0	111.5
POPULATION						
Total population	Million	46.6	47.0	47.3	47.7	48.1
Urban	Million	42.2	43.0	43.4	44.0	44.6
Nonurban	Million	4.4	4.0	3.9	3.7	3.5
Share of population in the following age groups						
0–4 years	%	7.2	6.9	6.7	6.4	6.2
5–14 years	%	14.2	14.1	14.1	13.8	13.8
15–19 years	%	8.6	8.2	7.7	7.8	7.4
20–44 years	%	44.3	44.1	44.0	43.9	43.8
45–64 years	%	18.8	19.4	20.0	20.3	20.9
65–79 years	%	5.9	6.2	6.5	6.7	7.0
80–over years	%	1.0	1.0	1.1	1.1	1.2
Median age of population	Years	32.6	33.3	33.4	33.9	34.3
Female labor force participation	%	40.9	41.3	41.6	42.0	42.4
LIFE EXPECTANCY						
Males	Years	71.7	72.9	73.4	74.0	74.9
Females	Years	79.2	79.3	79.9	80.4	80.8
FOOD INFRASTRUCTURE						
Trade capacity						
Grain imports	1,000 Ton	14,596	15,455	15,276	16,036	16,376
Total food and agricultural exports	Million US$	1,411	1,277	1,377	1,307	1,290
Perishable products	Million US$	200	231	218	248	257
Fishery exports	Million US$	1,521	1,505	1,384	1,378	1,310
Total food and agricultural imports	Million US$	5,927	6,783	5,856	5,278	5,943
Perishable products	Million US$	461	537	478	478	512
Fishery imports	Million US$	1,179	1,411	1,406	1,479	1,593
Port capacity	1,000 Tons	345,595	359,959	375,054	390,532	405,262
Road access	Kms	87,543	88,775	93,174	93,912	96,728
Rail access	Kms	6,667	6,706	6,744	6,785	6,824
Telecommunications	1,000 Lines	24,464	25,605	26,112	26,621	27,445
Power generation	Million Kwh	239,324	266,399	272,708	285,874	302,566
Percent of population with refrigerators	%	100.0	100.0	100.0	100.0	100.0
ROLE OF AGRICULTURE AND TRADE IN THE ECONOMY						
Agriculture as a share of GDP	%	5.2	5.1	4.6	4.5	4.2
Self sufficiency in grains	%	31.4	29.4	29.7	28.5	27.7
MACROECONOMICS INDICATORS						
GDP growth	%	10.9	9.3	2.8	5.0	6.1
Interest rate	%	8.9	8.1	7.1	7.5	6.8
Exchange rate	Won/US$	1,145.4	1,259.7	1,291.0	1,225	1,205