

KOREA NATIONAL FOOD CLUSTER

FOODPOLIS

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3rd INTERNATIONAL

Food Cluster Forum

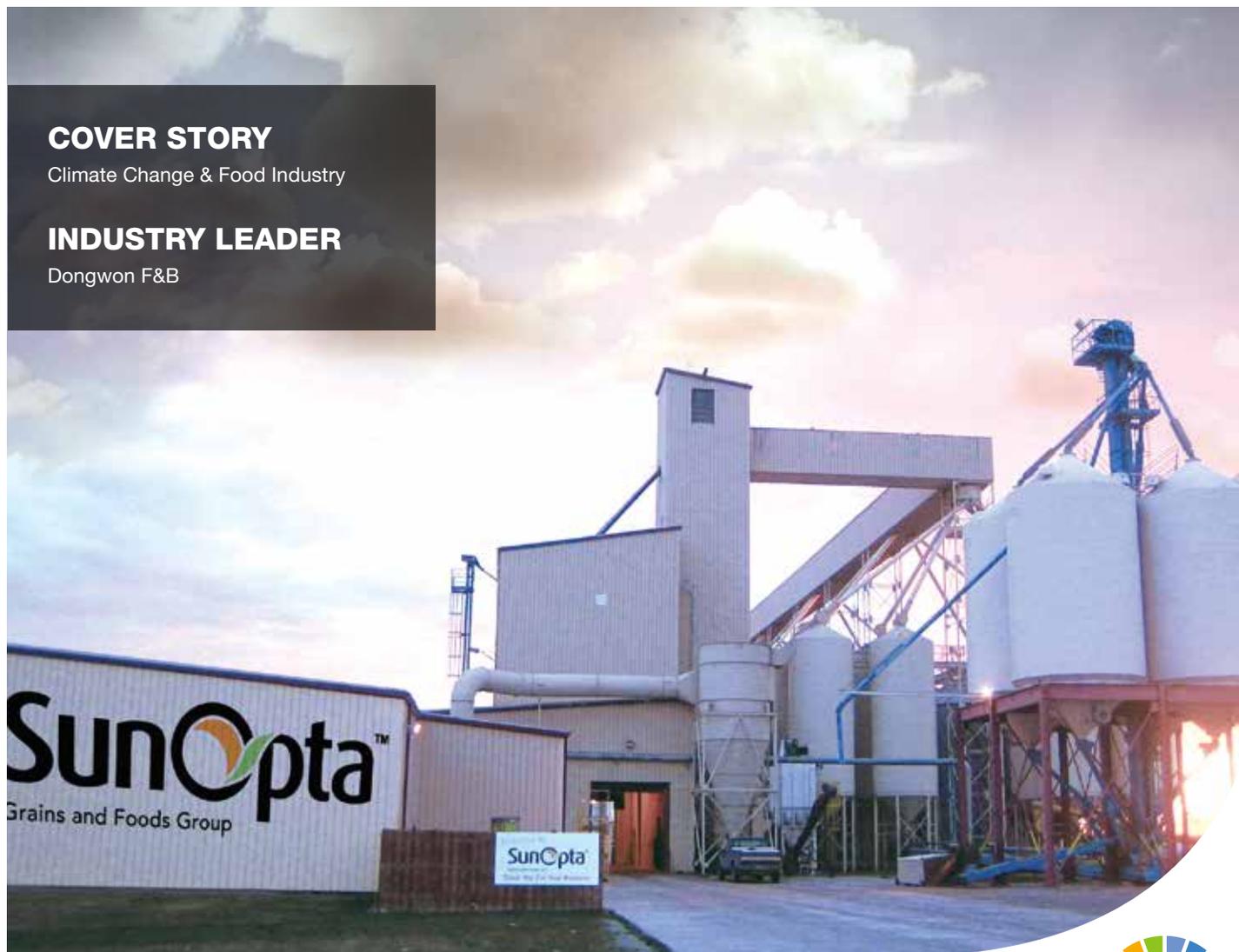


COVER STORY

Climate Change & Food Industry

INDUSTRY LEADER

Dongwon F&B



<http://eng.foodpolis.kr>



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FOODPOLIS

Publisher

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DEAR FRIENDS,

We are making very good progress with our ambitious project to develop Asia's first food cluster in Asia that will start operations in 2015.

On May 15th, we organized the 3rd International Food Cluster Forum, which was an excellent platform to exchange ideas about the cluster and meet potential investors. I am happy to note that many foreign food companies and organizations are showing a keen interest in FOODPOLIS.

The cluster, which plans to be the home of 160 food companies and ten R&D centers, is ever more relevant today as food quality and safety are priority to satisfy the increasing demand and regain the consumer confidence.

More than a business platform, FOODPOLIS will be a place where global experts in food can meet to discuss research and develop solutions for the world's most complex issues.

FOODPOLIS will be a knowledge-based center, with owned intellectual property focused on how to best address global food needs. Especially, with Asia-Pacific holding a significant market share in the global food market, the R&D centers in the cluster will constantly be looking ahead for new demands, trends and global issues.

Its holistic approach will contribute to help solve the world's most complex issues of the food sector: from the development of food, processing and manufacturing of products to R&D of new technologies.

Korea is certainly appropriate as the key location for companies to watch Asian market and fulfill its mission to feed the billions of people in Asia. FOODPOLIS will play a pivotal role to accomplish this.

A handwritten signature in black ink, appearing to read 'Dong Phil Lee', written in a cursive style.

LEE Dong Phil

Minister of Agriculture, Food & Rural Affairs

2013 Economic Growth Projection at 2.7%

Korea revised up its economic growth forecast for 2013 from 2.3% to 2.7% to reflect the impact of extra budget and the central bank's interest rate cut. The government predicted the economy is expected to see recover moderately in the second half (H2) of this year, and grow at an annual rate of 4% next year.

The number of the employed is forecast to rise from 250,000 to 300,000 while current account surplus is estimated to reach \$38 billion, said the government.

The government said it will execute the budget secured from compilation of supplementary budget until the third quarter (Q3) and expand its investment into public institutions from 52.9 trillion won to 53.4 trillion won including Social Overhead Cost (SOC).

The BOK will be flexible in managing monetary and credit policies. It also decided to adjust the scope and ceiling regarding soft loans extended to small and mid-size enterprises in an elastic manner and ram up efforts to stabilize the foreign exchange market if the market grows volatile.



'Government 3.0' to Widen Transparency

The Korean government will broaden the disclosure of administrative information except in cases of national security or personal privacy starting in 2014. President Park Geun-hye and heads of government organizations announced a basic

plan called the 'Government 3.0' vision, which allows wider public access to government data. This initiative refers to the government reform drive to boost transparency, information sharing, communication, and cooperation in overall state affairs management.

Under the announced plan, public access will be broadened to administrative data collected by all government organizations, including central and regional governments, state-run committees, and state-invested institutions, starting next year. This vision will apply to all forms of administrative information in all stages of the policy-making process from preparation to implementation. So far, public access was allowed to only 0.3% of the total administrative data and only lists of documents were available unless an applicant submits disclosure requests.

Under the initiative, the government will extend the scope of public data disclosure to 6,150 items by 2017 from the existing 2,260 items. Public organizations will also raise the disclosure scale of the predicted number of 15,700 source data items to 40% by 2017 from the current level of 14%.

To boost accuracy of information, the government will upgrade the quality of administrative data and create an integrated data provision channel online (data.go.kr) in order to enhance public access.

Govt. to Reduce Tax Deductions, Expand Tax Credits

The government plans to overhaul the code of tax deductions, the so-called "13th monthly salary". It will scale back tax deductions while expanding tax credits. Regarding credit card spending, which is entitled to tax deductions, deductible limit is likely to decline 5% points. At present, if credit card spending exceeds 25% of annual salary, 15% of the credit card payment is subject to tax deductions. However, from next year, only 10% will be subject to tax deductions.

Currently, one million won of tax deductions have been offered for taxpayer, his or her spouse and dependents. However, the government plans to move toward the new tax credit scheme, which gives a certain amount of tax refunds, according to the number of people and amount of income. Under the new scheme, the amount of tax cut benefits available to low and high-income earners will be similar regardless of the number of dependents.

In addition, low-income earners with 400 billion won or below income will be offered 500,000-won financial support per one child with the introduction of child tax credit (CTC), a scheme that President Park Geun-hye promised. This means low-income bracket is entitled to greater tax benefits compared to high-income bracket.

Sweeping Deregulation to Bolster Economy

President Park Geun-hye said that the country “needs to promote investment with a sweeping deregulation that actually produces an effect on the ground.”

“I have seen too many corporations troubled by inconsistent regulations. The economy is spurred by upbeat sentiments, so we need to strongly support companies that are willing to make bold investments in these difficult times.” Moreover, “easing regulations is the most cost-effective policy to encourage investment in corporations. Unnecessary regulations need to be repaired to stimulate economic growth,” she said.

She emphasized that Korean companies should not be short-sighted and target only the domestic market. “I would like to make sure Korean companies that target the global market are no longer disadvantaged and hampered in the home market.”

Park said her economic democratization drive is not about suppressing companies and is designed to create an environment of fair competition where hard-working economic players can take their fair share and realize their dream. Her remarks were made at a meeting with senior secretaries and officials from related government agencies.



Korea to Raise \$120 bn to Enforce Major Policy Agendas

The government has unveiled a set of detailed financing plans to secure necessary money to enforce its major policy agendas over the next five years.

The plans are focused on raising about 135 trillion won (\$120 billion) to carry out campaign pledges of President Park Geun-hye. During the 2013-2017 period, the government will allocate 33.9 trillion won, or 25%, of the funds to realize the government’s creative economy vision and stabilize the living

situation, 79.3 trillion won, or 59%, to promote employment and welfare, 6.7 trillion won, or 5%, to expand opportunities for cultural activities and 17.6 trillion won, or 13%, to strengthen the country’s defense and establish the foundation for peaceful unification.

The government will also inject 17 trillion won to complete National Happiness Pension to be paid to the elderly (up to 200,000 won a month) and 9.4 trillion won to construct houses and 1.4 trillion won to double the monthly pay for enlisted men.

To tackle the low birth rate problems, the government will provide full support during the course of study at university for a student born a third child.



Plans to Create 930,000 Part-time Jobs by 2017

The government said it would create 930,000 decent part-time jobs by 2017 as part of an effort to meet its employment target of 70%.

To this end, the government has decided to push for the hiring of part-time mid-level civil servants and public school teachers for the first time in 2014, while diversifying employment patterns and giving women, adolescents and the elderly more chances to work.

To encourage the private sector to join the initiative, the government will provide companies that create quality part-time jobs with tax benefits, along with other administrative incentives.

It is one of the key measures under the government’s comprehensive policy roadmap to raise the employment rate to 70%. Under the roadmap, the government will increase the current 1.49 million to 2.42 million jobs by 2017. The government plans to provide a legal ground to allow part-time positions to be applied to government officials (seventh grade or below) and public school teachers.

To resolve long-term working hours and encourage job sharing, holiday work will be included in extended working hours which are limited at 12 hours and the number of special types of work where extended working hours are unlimited will be reduced to 10 from 12.

Top 30 Business Groups Add 280,000 jobs

Korea's top 30 business groups increased their combined payroll 280,000 people to 1.12 million in the four years following the 2008 global financial crisis. In particular, CJ Group more than doubled its employees, posting the highest increase in the four years.

The 30 biggest business groups by asset value excluding public firms listed a total of 1.12 million employees on their payrolls late last year, said local corporate information provider Chaebul.com. The number is up 33.4%, or 280,828, from 842,156 employees in late 2008.

Of the total increase, 70,929 workers have joined the 30 largest business groups' workforce, as their companies became subsidiaries of the top business groups through M&As. When excluding them, the top 30 business groups expanded 209,899 workers.

Based on 209,899 workers, the 30 largest companies boosted their payrolls 24.9% in the past four years, which is equivalent to 52,500 new jobs on average each year.



Food Industry's Q1 Profits

The majority of Korean food firms saw their earnings tumble in the first quarter of this year due to business hour regulations on large retailers by the government and weak consumer demand amid the economic slump.

Combined operating profit of the country's top 19 food firms came to 470.3 billion won (\$419.7 million) in the January-March period, down 14.55% from 550.2 billion won a year earlier, according to the data by the Financial Supervisory Service (FSS).

CJ Cheiljedang Corp., the top industry player, posted 158.4 billion won in operating profit in the first quarter, down 20.95% on-year. Operating profit of Orion Confectionery Co. fell 19.73%, with that of Lotte Chilsung Beverage Co.,

the largest beverage company, retreating 28.74% over the cited period.

Pulmuone Foods Co. suffered the biggest drop of 67.93% in operating profit in the first three months of this year. Operating profit of Crown Confectionary Co. edged down 1.8%, while that of Daehan Flour Mill Co. and Bingrae Co. shed 34.64% and 50%, respectively, over the cited period.

Despite this, some food companies fared better in the first quarter. Daesang Corp., Dongwon F&B Co., and Sajo-haepyo Corp.'s operating profits increased 6.13%, 28.34% and 273.37%, respectively, over the cited period. Samlip General Foods Co. saw a whopping 644.37% increase in its operating profit thanks to the popularity of its new bakery products.

Forbes List Ranks Lotte Department Stores Third

Lotte Shopping has been ranked No. 1 in Asia and third in the world among department stores by Forbes magazine's Global 2000 list. Lotte Shopping has moved up steadily in the rankings, listed at No. 6 in 2011 and No. 4 last year.

The Forbes list ranks the world's leading companies based on their assets, sales, profit and market capitalization. Lotte Shopping, with annual sales of \$22.2 billion, a net operating profit of \$1 billion, assets of \$34.6 billion and market capitalization of \$10.3 billion, was ranked 470, up from the 518 last year.

Among the 2,000 companies, 16 department stores were listed including PPR of France, ranked No.1, followed by Macy's of the United States. In fourth position was TJX of the United States, with Falabella of Chile in fifth.

Lotte Shopping was the only department store company listed in the Global 2000, and it has been included in the world sector of the Dow Jones Sustainability Index for four consecutive years. In addition, it was the first Korean retailer to be named supersector leader for three years.



Regulator Puts 40 Firms Under Restructuring

Korea's financial regulator has picked 40 local companies to be placed under a restructuring, as part of a corporate overhaul to help ailing sectors recover from the economic downturn. Of the selected companies, 27 firms graded as "C" must undergo a stringent debt workout process, with the remaining 13 players given a "D" rating having to file for court receivership for liquidation, according to the Financial Supervisory Service (FSS).

The total number of the troubled companies is higher this year compared with the previous year. The FSS chose 36 firms in 2012.

The list is based on the result of the FSS evaluation on 584 firms, the regulator said. It excludes those already undergoing a debt rescheduling. The move comes amid the persistent economic downturn here and abroad, which has dealt a huge blow to local corporate productivity as faltering global demand dented their performance.



3rd Science, Technology Basic Plan

The government will invest 92 trillion won (\$79 billion) in science technology Research & Development (R&D) activities by 2017, as per the '3rd science and technology basic plan' announced at a meeting chaired by Prime Minister Chung Hong-won.

The science and technology basic plan provides framework every five year for relevant bodies to implement and devise comprehensive science and technology policies. The third plan covers ways to promote the nation's science and technology development from this year to 2017.

With a vision of opening a hopeful era founded upon creative science technology, the government aims at attaining \$30,000 GDP and creating 640,000 jobs by injecting 92.4 trillion won in the R&D sector over the next five years in the third phase of the plan.



High Five strategies for fulfilling the goal include; expanding investment in R&D activities; stepping up creative capabilities in the mid to long-term; offering support for exploring new business opportunities; and creating jobs. The outcome of R&D activities will be furthered to assist in transferring technology and connecting with job creation, the government said.

New Foreign Investor Rules Reflect Future Hiring, IT Services

The size of future employment in Korea is a new requirement for designation of a foreign-invested company, and IT services have been added to the industry category for a foreign-invested zone. The Ministry of Trade, Industry and Energy said an amendment to an act promoting foreign investment that contains these changes took effect June 12th.

The new rules require data on the number of employees expected as a result of foreign investment or prospective hiring by a foreign-invested company when it is registered. In the past, registration required information on the investment amount, portion of foreign investment in the entire outlay and investment methods, but the expected size of employment has been added as a prerequisite.

Foreign investment in IT services worth more than \$30 million will be included in the industry category for a foreign-invested zone, joining manufacturing (\$30 million), tourism (\$20 million), logistics (\$10 million) and research and development (\$2 million).

In addition, the government also strengthened the requirement for designation of a foreign-invested company for those maintaining a 30-percent investment threshold for a minimum of five years. Even if a company does not meet the criteria, however, the designation can still be granted if the company's contribution to the Korean economy is considered significant.

Seoul, Beijing Close to Striking FTA



Korea and China have made significant progress in their latest round of talks for a bilateral free trade agreement (FTA), nearly reaching agreement on the level of market liberalization for their industrial products.

The sixth and latest round of FTA negotiations between the two countries was held in South Korea's port city of Busan in the first week of July, about one week after a Beijing summit of the countries' heads of state.

The two countries neared agreement on a modality dealing with the level of market opening for their products. Based on the agreement between the countries' heads of state to pursue a comprehensive FTA of a high-level, the two sides have agreed to also include competition, transparency, e-commerce, environment and economic cooperation in their FTA negotiations.

The two sides still remained divided on a number of issues, but that they have agreed to continue eliminating contentious issues in future talks.

Korea and ASEAN Share Vision in Transport

The 4th ASEAN-ROK Transport Cooperation Forum was held in Busan on June 19 for a two-day run. Hosted by Korea's Ministry of Land, Infrastructure and Transport (MOLIT), the global forum has been held annually since its 2010 launch to pursue transportation cooperation as well as to share a long-term vision with ASEAN nations. This year's forum was attended by vice ministers of transport from ten ASEAN member states and a director-general in charge of infrastructure at the ASEAN Secretariat among others.

At the meeting, participants discussed new transportation conditions that will be shaped by IT technologies. The discussion ranged widely, touching on Korea's current status characterized by the Smart Highway and the Intelligent Transportation System (ITS), which have provided a model for some nations.

A business meeting was scheduled during the forum for the first time this year. Some of the member states were given a briefing on Korea's IT technologies and looked around the Busan Transportation Information Center for in-depth information.



Korea, EU Agree to Expand Cooperation in S&T

Korea and the European Union made a stride in science and technology cooperation. According to the Ministry of Science, ICT and Future Planning (MSIP), Korea and the European Commission agreed to expand mutual cooperation in science and technology during a meeting in Brussels, Belgium on June 26th.

The two sides agreed on finding new joint research tasks in the fields of nano security, environment, health, future Internet, smart grid, offshore wind power, and new medicine in relation to "Horizon 2020," a financial instrument implementing the Innovation Union program, a flagship initiative aimed at securing Europe's global competitiveness. They also agreed to continue working-level discussions on forming new tasks and deciding methods of research and size of financial assistance.

After signing a science and technology cooperation agreement in November 2006, the two sides have taken turns holding joint committee meetings since 2007. The two sides also agreed to send young Korean researchers to the European Research Council (ERC) program, an independent body that funds investigator-driven frontier research in the EU, for the short term (three to twelve months), and come up with detailed implementation plans.

Korea, Myanmar Agree on Economic Cooperation Issues

Deputy Prime Minister and Finance Minister Hyun Oh-seok and his delegation met with Myanmar's delegation led by Kan Zaw, Myanmar's Minister of National Planning and Economic Development, in the country's capital Naypyidaw and discussed such cooperation at the first meeting of their bilateral economic cooperation committee.

The two countries consented to launch a Myanmar's equivalent of New Town Movement, Korea's unique development project. The Korean government is set to provide a series of infrastructure in package, including agricultural product processing plants and schools.

CJ Cheil Jedang and other Korean companies will explore establishing large-scale sugar cane plantations. Furthermore, Korea will be constructing a development think tank in Myanmar with its own technologies, capital and personnel to draft a blueprint for a 5-year economic development.

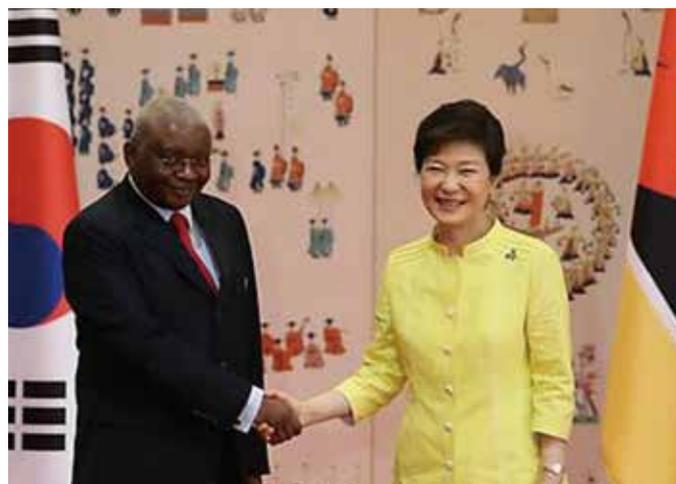
The two governments agreed to expand investment in Myanmar's infrastructure. The Korean government agreed to invest \$146 million in constructing a bridge across Yangon River that runs through Dala Township, and an industrial complex for Korean companies in the south of the town. In addition, the two nations will increase bilateral exchange in the energy and financial sectors.



Korea, Mozambique Discuss Cooperation

President Park Geun-hye on June 4 discussed strengthening bilateral cooperation in her summit talks with Mozambican President Armando Emilio Guebuza at the presidential office of Cheong Wa Dae in Seoul. The two leaders exchanged opinions on a wide range of issues, including trade, energy, resources, official development assistance (ODA) and bilateral cooperation between their countries in the international community.

President Park said, "For the stable and sustainable de-



velopment of Mozambique, Korea would like to strengthen bilateral cooperation in the infrastructure construction and energy resources sectors." "Korea's experiences in rural development and 'Saemaeul Undong (the New Community Movement)' will contribute to the development of Mozambique," she added.

President Guebuza responded by saying Mozambique highly values Korea's investment in human resources development, adding, "We want to learn how ICT-related industries developed as a growth engine of the knowledge-based Korean economy."

Korea and NZ to Strengthen Partnership

Korea and New Zealand have discussed a range of issues of mutual interest on June 21 at the 16th Policy Consultation. Korea's Deputy Foreign Minister Lee Kyung-soo and New Zealand's Deputy Foreign Minister Andrea Smith met in Seoul to discuss a wide range of bilateral issues and ways to further strengthen their partnership in the future as well as exchange views on topics of mutual concern such as the current situation on the Korean Peninsula and the surrounding region.

Leaders of the two nations gave high marks to the bilateral cooperation that have seen a constant development in various sectors such as politics, diplomacy, economy, trade, and exchanges of workforce and culture since the establishment of ties in 1962 and have further developed to expand into such promising sectors as the Antarctic, science, and information and communications technology.

The New Zealand delegation conveyed its satisfaction with the current bilateral friendship, while expressing its hope that the two nations will be provided a watershed opportunity for deepening cooperative ties and also of an early conclusion of the FTA between Korea and New Zealand.

Korea's Biggest Food Fair



The Korea Food Show 2013, the nation's largest food exhibition, hosted by the Ministry of Agriculture, Food and Rural Affairs, was held at KINTEX in Goyang, Gyeonggi Province from May 14th-17th.

Close to 1,600 companies and 1,980 food professionals from more than 50 nations attended the event, and drew 140,000 visitors, the largest number since it was launched in 2008.

Participants had the opportunity to learn about the development of the Korean food industry and its potential under the theme, "The Interaction Between K-Food and the World."

The exhibition was mainly divided into four zones in accordance with themes — nature, tradition, culture, and vision — that are affiliated with Korean food.

A key purpose of the exhibition was to provide an opportunity for Korea's small- and medium-sized enterprises to promote their business ideas and strategies in local and international markets. The ministry has set up booths exclusively for more than 200 SMEs to share their ideas with five participating conglomerates — CJ Group, Daesang, Nongshim, Maeil Dairies and SPC Group — and international firms.

Caffe Bene Moves into Malaysia, Brunei, and Singapore

Caffe Bene, Korea's homegrown specialty coffee franchise brand, will open additional locations in three Southeast Asian countries of Malaysia, Brunei, and Singapore. The company said on July 8 that it would join hands with Malaysia's BT Capital under a master franchise contract. The two companies will work together in opening store locations in these three countries by establishing a separate entity called "Asia Caffe Bene."

Caffe Bene plans to open eight stores within a year and 25 within three years in the three markets. Currently Caffe Bene runs a total of 63 overseas coffee shop locations, including six in the United States, 55 in China, and two in the Philippines. It will open two more locations in Saudi Arabia and Indonesia within this month. As of April this year, the company has 850 locations in Korea.



CJ CheilJedang Eyes 6 Tril. Won Pet Food Market

CJ CheilJedang is pushing its new pet food line. The company in February this year launched "O Fresh," the premium pet food brand. By end-July it will introduce three pet food items, followed by canned varieties, snacks, and health supplements before the year's end.

Currently Korea's pet food market is dominated by import brands such as Nestle, Royal Canin, and ANF Premium Pet Food. These import brands account for more than 70% of the market. In large discount retail outlets, the ratio between imported and homegrown pet food brands is about 6.4 to 3.6.

CJ CheilJedang has begun its pet food business since the 1990s. Although the company has focused on low-priced items until recently, it changed the course since early this year with the launch of the "O Fresh" premium brand.

Mr. Lee Kwon-il, CJ's senior manager in the pet food division, said, "We will make our O Fresh brand a 30-billion-won brand effectively competing with major foreign brands like Nestle and Royal Canin. After taking the domestic market, we will move into markets in China and Southeast Asia."

Female Population Reaches 50%



The number of women as a percentage of the total population has reached the 50-percent mark for the first time since the national census started in 1970, according to Statistics Korea. The number of Korean women stood at 25.08 million this year. The total population also rose 0.4% in 2013 from a year ago to 50.2 million.

The ratio of women to men increased from 49.5% in 1980 to 49.9% in 2010. The statistics agency attributed the increase to the collapse of the country's traditional preference for sons and women's relatively longer life expectancy.

K-shuttle in Service for Foreign Tourists

The Korea Visit Committee, jointly with seven provincial governments, resumed operation of a "K-shuttle" service, for foreigners to visit major tourist destinations by bus.

The "K-shuttle" is a foreigner-only bus tour with two programs touring the southwestern and the southeastern parts of the country. It directly connects to major tourist hot-spots to reduce the time it takes to move from place to place.

For the southwest tour, the bus departs at 8:30 a.m. from in front of the Donghwa Duty Free store at Gwanghwamun on Tuesdays, Thursdays, Saturdays and Sundays, bound for Buyeo, Jeonju, Yeosu, Suncheon and Busan, before returning to Seoul.

On southeast tour A program, the bus leaves Seoul on Tuesdays for Busan, before visiting Gyeongju, Andong, Wonju, Gangneung and PyeongChang, then returning to Seoul. The southeast B program departs every Saturday from Seoul for PyeongChang, Gangneung, Wonju, Andong and Gyeong-

ju, then back to Seoul.

The price of the package is 290,000 won (\$260) including the bus, two days stay in tourist hotels, two breakfasts, and entrance fees to tourist destinations.



New Transport Card Offers Easy Travel Options

The Ministry of Land, Infrastructure and Transport (MOLIT) has adopted an integrated system that offers even more convenient service, allowing domestic travelers access to every means of public transportation with only a card.

The current transportation card has many restrictions on regions and modes of transportation. More specifically, transportation cards are used only for metro lines and buses, while a hi-pass device is used by drivers to pay highway tolls without stopping and handing over cash, and tickets are purchased for trains with credit cards or cash.

However, the new card, to be released from around the end of this year enables travelers to crisscross the entire country without any other devices. The system improvement was a product of collaboration of MOLIT, Gyeonggi-do (Gyeonggi Province), Korail, and the Korea Expressway Corporation. It will be available around November at convenience stores with Cashbee or Railplus marks.



3rd INTERNATIONAL FOOD CLUSTER FORUM

*The Ministry of Agriculture, Food and Rural Affairs
hosted the 3rd International Food Cluster Forum on
May 15th, 2013 at Grand Hyatt, Seoul.*





The Ministry of Agriculture, Food and Rural Affairs (MAFRA) has started to promote FOOSPOLIS, a food industrial complex dedicated to research, development and processing of food products to supply the world's largest consumer markets, in right earnest. It hosted the 3rd International Food Forum on May 15th, to promote the cluster to potential investors. More than 100 people from food companies at home and abroad, journalists of foreign media outlets and officials from MAFRA and Iksan City were invited to participate. The event kicked off with a press conference at 11 am, which was attended by many prominent foreign journalists in Seoul.

Ms. Kim Kyung-mee, Director of MAFRA, who is in charge of the food cluster project gave a short presentation, highlighting the major advantages and investment opportunities.

She noted that many people are familiar with the world's 4 largest food clusters: Food Valley in The Netherlands, Sweden's Oresund, Napa Valley in the United States, and Italy's Emilia Romagna. However, with China's rapid economic development shifting the center of the global food industry to Asia-Pacific, which accounts for 40% of the world's food market, the existing food clusters might not satisfy all businesses.

For this reason it was decided to promote FOODPOLIS, the first food cluster in Asia. It is a national project sponsored by the Korean government, to help create the best environment for corporations to produce high value-added products by establishing one-stop service for R&D, processing and logistics.

Northeast Asia encompasses Japan, China, and Korea, accounting for 20% of the world's GDP, 25% of the world's population, and 20% of the world's total trade volume. It is indeed the center of economic development, she said.

Korea is geographically located in the center of Northeast Asia's air and shipping logistics network, which is the best location to access not only China and Japan, but also Southeast Asian countries such as Singapore, Malaysia, and Vietnam. Considering the popularity and frenzy of Korean Wave throughout Asia, the country is also an appealing location for culture and entertainment along with its strategic geography.

"Korea's strategic location provides easy access to the regions favorable economy and culture. The country has maintained extensive trade relations with major economies, and with a total of \$ 1trillion dollar trade volume, it is the 8th largest trading nation in the world," she noted.



*Director Kim Kyung-mee,
Presentation to Foreign Correspondents*



procedures and reduction in tariff on raw materials by designating the general bonded area to construct a 'food export base' within the industrial complex.

Ms. Kim observed that FOODPOLIS' system for food innovation doesn't end here. The cluster will provide financial and management consulting, including financial support to new businesses.

"Exceptional benefits and reasonable incentive policy will be provided. Incentives for new businesses to purchase land and construction during 2013-2014 will be provided. Subsidies for investment, employment and education for new foreign businesses will be funded to help foreign businesses reduce costs before investments."

Explaining the plan for the project, she noted that FOODPOLIS is divided into a business district specialized for the food industry and a residential district which provides eco-friendly living space for employees.

The Food industry District will be built on 2.32 million^m² area, combining Enterprise Support Facilities Zone, Private Research Facility Zone, Strategic Food Zone, Global Food Zone, Logistics & Distribution Zone, General Food Zone and Food-Related Industries Zone. Additionally, 150 food businesses, 10 private R&D labs and national R&D center will be built as an industrial complex specialized for food industry.

The Residential District will be built on 1.26 million^m² area featuring residential section, commercial section, education section, entertainment and culture section as well as upscale living environment and various facilities for education, culture, and leisure.

There are many other strong points for FOODPOLIS in addition to its strategic location. The expanding economic zone through free trade agreements will bring new opportunities to the food market.

Korea signed an FTA with 27 countries of the European Union in 2011 and the United States in 2012, along with 20 other FTAs including countries from South America, India and ASEAN.

"Signing FTA with numerous countries has played a vital role in expansion of the Korean economy. We are confident that it will lead to more foreign trade and exchange."

Human resource is another factor, besides FTAs, that has enabled Korea's economic success. Koreans are renowned for their passion towards education, as evidenced by its #1 ranking among the OECD countries for college entrance. Such passion will strengthen companies' competitiveness and continue to support qualitative innovation.

FOODPOLIS is planning to build an HR intermediary system that will introduce the best and the most fitting talent that companies require. In addition to the HR intermediary system, FOODPOLIS will establish a Food Science Belt that will create opportunities for stakeholders in the food industry.

10 private research centers and 6 national institutions, along with the 3 main R&D facilities supported by the government, will form a close network and carry out functions to create innovation.

"Through such collaboration and business environment, everyone will have access to the world class R&D service, safety inspection and management, develop high value added functional products, develop packaging technology and tailored packing."

FOODPOLIS will provide optimized export services for food companies. This service will lead to simplification of export

"The Food industry district and residential district of FOODPOLIS will become globally recognized city symbolizing food history and culture with a harmonizing future and cutting edge features."

Ms. Kim also touched on the six core businesses support facilities.

"Experience various benefits including support for food technology development and export support through support facilities for 6 core businesses including national R&D center (Food Functionality Evaluation Center, Food Packing Center, Food Quality and Safety Center), business coordinating system and FOODPOLIS fund."

The project will build creative business support systems for innovation in business. Various support programs supporting construction of R&D and network for High value food, base for various food exports, improvement in capability of food companies, shared growth system for agriculture, fisheries and food industry will be provided, she said. She concluded the presentation by stating that FOODPOLIS will be a reliable business partner providing superior facilities as well as fast and convenient services in all categories including institution, human resources, business and finance. Companies in the



cluster are expected to record 15 trillion won in combined annual sales and create 22,000 jobs.

"We envision close collaboration between companies in the cluster and national agriculture and food R&D institutes. These partnerships will lead to advances in food processing technology, which will then allow commodities produced within the cluster to be exported efficiently through seaports and airports nearby."

Following the presentation, there was a lively Q&A session, to clarify the various questions that journalist had about

the project.

"More than a business platform, FOODPOLIS is a place where global experts in food meet to discuss research and develop solutions for the world's most complex issues. We bring together experts on the global obesity epidemic, food scarcity and the growing problem of hunger, the shifting demographics and the link of food and wellbeing, food costs and policies, among others. It will be a knowledge-based center, with owned intellectual property focused on how to best address global food needs," Ms. Kim said.



*Investment MOU
Signing Ceremony
Between
Forno d'Asolo and
FOODPOLIS
15th May 2013*



*Congratulatory Speaker,
Deputy Minister for Food Industry Policy,
CHOI Hee-Jong of MAFRA*



*Opening Speech, Mr. Park Chong-guk,
Chairman of the board, Agency for Korea National
Food Cluster*



*Professor Park Sam-ock,
Moderator of International Food Cluster Forum*

As of now, 67 companies and food-related research centers have already promised to have their presence in the cluster. They include CJ Cheiljedang, and Dongwon F&B of Korea, NIZO Food Research of the Netherlands, Jalux of Japan, SunOpta of Canada and InstantLabs of the United States. The latest entrant to the cluster is Italian food company Forno d' Asolo. Mr. Fabio Gallina, the firm's chief executive officer, signed a memorandum of understanding on investment with Ms. Kim after the press conference.

The International Forum began at 2 pm, and presentations were made by Mr. Andrew Grant, General Manager of McKinsey Global Public Sector, Mr. Ad Juriaanse, Managing Director of NIZO Food Research, Mr. Michael Conforme,

Country Manager of PI Korea and Mr. Shin Hyun-soo, director of global food industry business at CJ Cheiljedang.

Mr. Grant delivered the keynote speech on the latest trends in the food and agricultural business. He emphasized the importance of investment in food industry. Mr. Juriaanse spoke about the industrial significance of an R&D cluster under the title, "The World is My Lab."

"Innovation happens through networks, not in big laboratories," he said and called on officials in charge of the complex to become "flexible and international," describing them as core recipes for success that had been applied to several flourishing industrial towns such as Food Valley in the Netherlands, Napa Valley in the United States and Oresund in Denmark.



*Key-note Speaker, Mr. Andrew Grant,
General Manager of McKinsey Global Public
Sector*



*Session Speaker, Mr. AD Juriaanse,
Managing Director of NIZO Food Research*



*Session Speaker, Mr. Michael Conforme,
Country Manager, PI Korea*



*Session Speaker, Mr. Shin Hyun-soo,
Director of Global Food Industry Business at
CJ Cheiljedang*

Mr. Conforme delivered a speech highlighting the importance of human resources in the food business. He noted that the most valuable assets to any company are its employees

Mr. Shin gave a presentation on his firm's globalization strategy. He said that his company aims to generate 3 trillion won in annual sales in overseas markets by 2020, up from this year's goal of 550 billion won. To that end, he said, the company will become more aggressive in mergers and acquisitions, building overseas manufacturing bases for production of commodities in the local area.

"Understanding our target markets and customers is the first thing to do. Precise understanding is possible only with talented workers and a corporate culture that maximizes their capability."

After the successful completion of the forum, there was a networking event in the evening, where all the participants could mingle, discuss business prospects and have a good time.



INSIDE VIEW

Session 1
VIP RECEPTION



Session 2
**FOODPOLIS LUNCHEON
SESSION WITH FOREIGN
CORRESPONDENTS**



Session 3
**INTERNATIONAL
FOOD CLUSTER
FORUM**



Session 4
**WELCOME
BANQUET**



i For more details please contact:
Tel. +82-1688-8782
Web. <http://eng.foodpolis.kr>

AGRICULTURAL PRODUCT DISTRIBUTION SYSTEM

The Ministry of Agriculture, Food & Rural Affairs has announced a new product distribution system to resolve three major issues- high distribution costs, large price fluctuations, and discrepancies in producer-consumer pricing.



Since the agricultural product distribution system improvement project has been implemented several times but is thus far incomplete, the government is focusing on establishing a practical, and realistic plan reflecting public opinion through government-wide distribution system improvement TF, public-private joint forums, meetings, and site surveys.

This project has been planned as part of a policy paradigm shift based on a performance analysis of past distribution policies, with the goal of ensuring healthy and sustainable distribution system establishment.

Wholesale Market

The wholesale market is one of the most important distribution channels and accounts for over 50% of the freight volume of agricultural products. It is currently rife with issues concerning its inefficiency and poor logistics system.

This project will be implemented through competition encouragement, logistics efficiency improvement, and facility modernization based on transaction method diversification and policy improvement so that the importance of the wholesale market

is recognized anew, and its operation efficiency is increased.

Transaction method

Auction-oriented trading (79.3% in 2012) will be changed to a negotiated or net price transaction oriented market to reduce price fluctuations and improve market efficiency.

- Auction-oriented trading has advantages in assisting with small-scale shipper protection, offering fairness and impartiality in transaction procedures, trading volume, and pricing.
- The government will encourage market competition by increasing the negotiated or net price transaction rate to 20% by 2016 (8.9% in 2012) to resolve the issue.
- In addition, the transaction stability will be increased by establishing a payment support organization for wholesalers having trouble with payment.
- Price stability will be increased by decreasing agricultural product price fluctuations and market efficiency is expected to increase with increased trading units.

Policy

Competition will be encouraged in the wholesale market and with other distribution channels, including distribution agents in the production areas, major supermarkets, and agricultural cooperatives through a relaxation of regulations on commission agents and wholesalers.

- Wholesale market corporations can only participate in agricultural product auctions for now. However, direct transactions and process, storage, and logistics business will be permitted through a relaxation in regulations for negotiated or net price transaction products.
- A part of prohibited transactions between commission agents and wholesalers will be permitted so that one-stop shopping for a wide range of products will be available for retailers (small and medium sized grocery stores, restaurants, etc.) using wholesale markets.
- The Korean government will submit the Agricultural and Marine Product Distribution and Price Stabilization' Amendment ' including the above content.

Logistics and facilities

A consistent pallet distribution system linking producers, wholesale markets, and consumers will be established to reduce unnecessary distribution costs.

- A minimum pallet trading unit will be set by item to fix the pallet distribution system. This will be implemented by stage, in accordance with the agreement so as not to restrict small farm transaction.
- If products are delivered based on the pallet unit, pallet usage and common selection fees will be supported by the government.

Market function maintenance

33 public wholesale markets will be divided into base-oriented, producer-oriented, consumer-oriented, and satellite-oriented markets according to geographic conditions and distribution environment, with facility modernization



and market purpose conversion.

Expansion of Direct Transaction

Direct transactions have increased according to recent social environment shifts will be promoted through customized support, new direct transaction development, and policy establishment.

A direct transaction infrastructure

will be established by supporting public workplaces, farmers markets, an enterprise resource system (ERP), education, and consulting services.

- The government will implement a 'Bunch Project' to reduce distribution costs through urban-rural exchange support, box recycling, and a joint delivery project.
- Farmers markets will be promoted in cooperation with local governments by securing an optimal location for establishing a direct transaction markets where

visitors can purchase a wide range of agricultural products at a cheap price, taking advantage of nostalgia for traditional lifestyles. The '1st Direct Transactions Festival' will be held in October to provide opportunities for consumers to experience many types of direct transaction.

- Marketing funds for the 'Direct Transactions Festival' will be supported by the government to develop competent direct transaction agencies.

The tentatively named 'Act on Direct Agricultural Product Transaction Promotion' will be legislated by 2014 to establish a legal basis for the new system, including a direct transaction certification system.

Agricultural Cooperative Systemization

For markets composed of small-income farms, one of the most important issues is distribution systemization by producer associations. The agricultural product

distribution process will be simplified through the establishment of a wholesale logistics center oriented distribution system.

- Logistics centers will be built in five regions to strengthen marketability and develop a joint delivery organization. Direct agricultural product transactions will be expanded to small and medium supermarket associations for mutual growth with small businesses.

Livestock cooperative packers (safe animal breeding organizations) will be operated such that livestock producer associations can deal with butchery, processing, and sales.

- To achieve this, the government plans to systematically organize and specialize farmhouses through cooperation between agricultural and local cooperatives and implement a nationwide integrated logistics system together with butchery and processing systems in each zone.



In addition, to improve the link between prices in producing districts and consumer pricing, the installation of butchers affiliated with agricultural cooperatives and fresh meat restaurants will be expanded.

- To improve the effectiveness of this plan, the government will conduct regular investigations on distribution status in consuming districts through consumer groups and announce the investigation results from this year. In addition, it plans to select (tentatively named) 'Good Price Stores' to encourage rational consumption activities.

Moreover, the government plans to promote the meat processing industry in order to improve the livestock product consumption structure where weighting is placed on meat parts preferred by consumers, such as pork belly.

- By June, related laws and regulations

including the Livestock Products Sanitary Control Act Enforcement Decree will be revised (Ministry of Food and Drug Safety) for deregulation to enable butchers to manufacture and sell processed meat products, such as locally produced ham.

- The MAFRA plans to support butchers and producer groups with processed meat products manufacturing facilities installation and operation fund (44 billion won in 2013).

Supply-Demand Management Systemization

The supply-demand policies of the past have had some effects on price stabilization. However, such stabilization policies were not announced in advance and as a result, a number of producers and distribution industry insiders expressed complaints about the low predictability.

To solve this problem, the government plans to promote a supply-demand stabilization policy with the participation of stakeholders, including consumers, based on accurate observation data.

- In addition, the government will implement a system to promptly provide producers and consumers with the observation data and decisions made by the supply-demand control committee.

First, the agricultural observation data investigation and analysis system will first be improved for the purpose of producing accurate observation data (KRW 8 billion, 2013).

- The agricultural observation model will be improved into a system linked with growth status and disease and insect pest outbreak monitoring. In addition, the government plans to minimize errors by increasing observation samples and monitoring frequency.
- Moreover, cooperation with the relevant organizations and associations for each item will be strengthened, such as the

Rural Development Administration, the National Agricultural Products Quality Management Service, and Statistics Korea, and the numbers of crop growth and modeling experts will be increased to reinforce the predictive power.

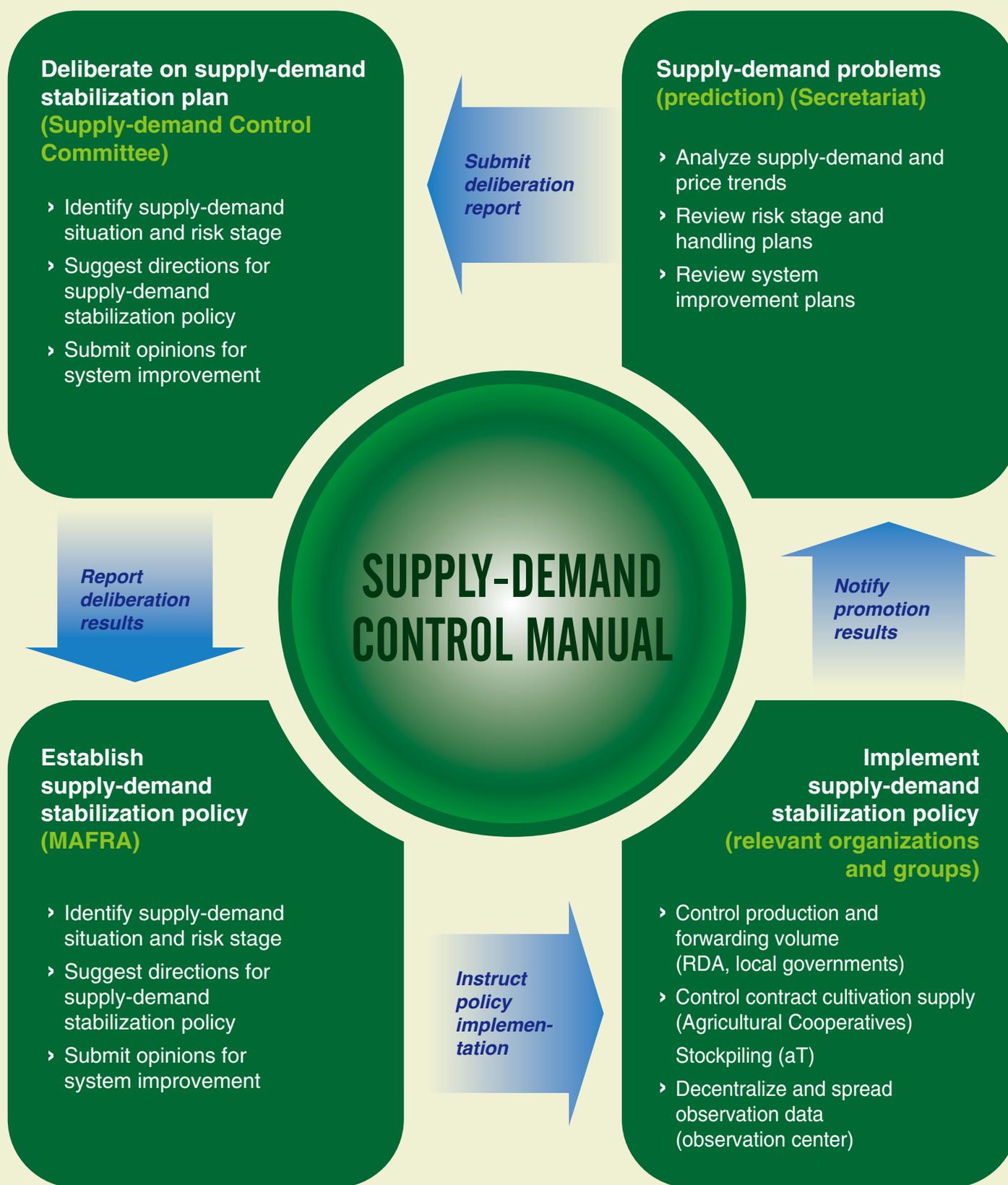
Second, the government will actively respond to short-term supply-demand instability by expanding stockpiles of domestic products in addition to import products.

- The government will enhance market control mechanism by expanding stockpiles of domestically grown radishes and onions in addition to the chili peppers, garlic, and napa cabbage for which the policy is implemented.
- In addition, it will resolve the problem of the price increases that occur in production districts each forwarding period by converting the forwarding period purchase system to one featuring advance purchases by contract.
- Meanwhile, the government will install large-scale forwarding control facilities in key radish and napa cabbage producing districts that frequently experience supply-demand instability, in order to store set quantities of products and release them according to supply-demand conditions.
- Moreover, the government plans to expand the scope of the government stockpile forwarding method of from forwarding centered on wholesale markets and large distributors, to more direct supply to markets, including traditional markets.

Third, the government plans to encourage supply and price stabilization by stages through an expansion of contract cultivation.

- Farming household participation will be accelerated by ensuring a minimum guaranteed price for contract cultivation farms in case of a sharp price drops and, accordingly, contract cultivation

Supply-demand control system



of items subject to supply-demand instability, such as napa cabbage, will be expanded annually.

- Napa cabbage and radish distributors in the producing districts will be converted into cooperatives or corporations in order to decentralize the roles of Agricultural Cooperatives and to encourage their participation in the supply-demand stabilization project.

Fourth, the government will set risk identification standards for use in supply-demand problems and draw up and operate an 'Agricultural Product Supply-demand Control Manual' providing standardized risk handling techniques and procedures.

- According to the price fluctuation levels, a 'stable zone' and risk stages (caution - alert - serious) are set and policies to be implemented in each risk stage are announced in advance.
- When a price is within the stable zone, supply-demand control is carried out through market processes.

Fifth, the government will strengthen communication and consensus in supply-demand policy promotion by installing and operating an 'Agricultural Products Supply-demand Control Committee.'

- Through the Supply-demand Control Committee organized with various stakeholders in balance, the government will collect opinions and promote agreement on information sharing, situation recognition, and handling plans for supply-demand issues.
- For pending issues, such as a rapid drops or increases in price, the government will discuss handling measures through the 'Supply-demand Control Committee' in order to develop the committee as a place for communication, where the stakeholders share recognition and form a consensus on supply-demand issues.

Finally, for a temporary supply-demand stability, the government will encourage

rational consumption by increasing the supply-demand and price information supply.

- Consumers will be assisted in selecting the time, quantity, and place of purchase (appropriate time for purchase, price trends with alternative items, and sale offer information) as information required for rational purchasing included in the existing 'Agricultural Observation,' 'Weekly Price Information for Thrifty Shoppers,' and 'Agricultural Product Price Information Network.'
- This information will be provided to consumers through the Internet and via smart phone applications and terrestrial broadcasting for easy access.

Agricultural Fair Trade Policy

The government plans to reinforce investigation and monitoring on unfair trade cases through an ombudsman system for small business protection and the Korean Agrifood Corporation Federation Fair Trade Secretariat.

The sales promotion subsidy system, which was established as a means to preserve large distributor earnings, will be improved in line with the purpose of sales promotion specified by the law.

i *Source: Ministry of Agriculture, Food & Rural Affairs (www.mafra.go.kr)*

Expected Effects

Once distribution improvement measures are successfully promoted as planned, it will lead to the resolution of a significant proportion of the problems in agricultural distribution. An expansion of the distribution percentage through direct trading and by producer groups (16% in 2012 -> 30% in 2016) will lower distribution costs by approximately 10 - 15%.

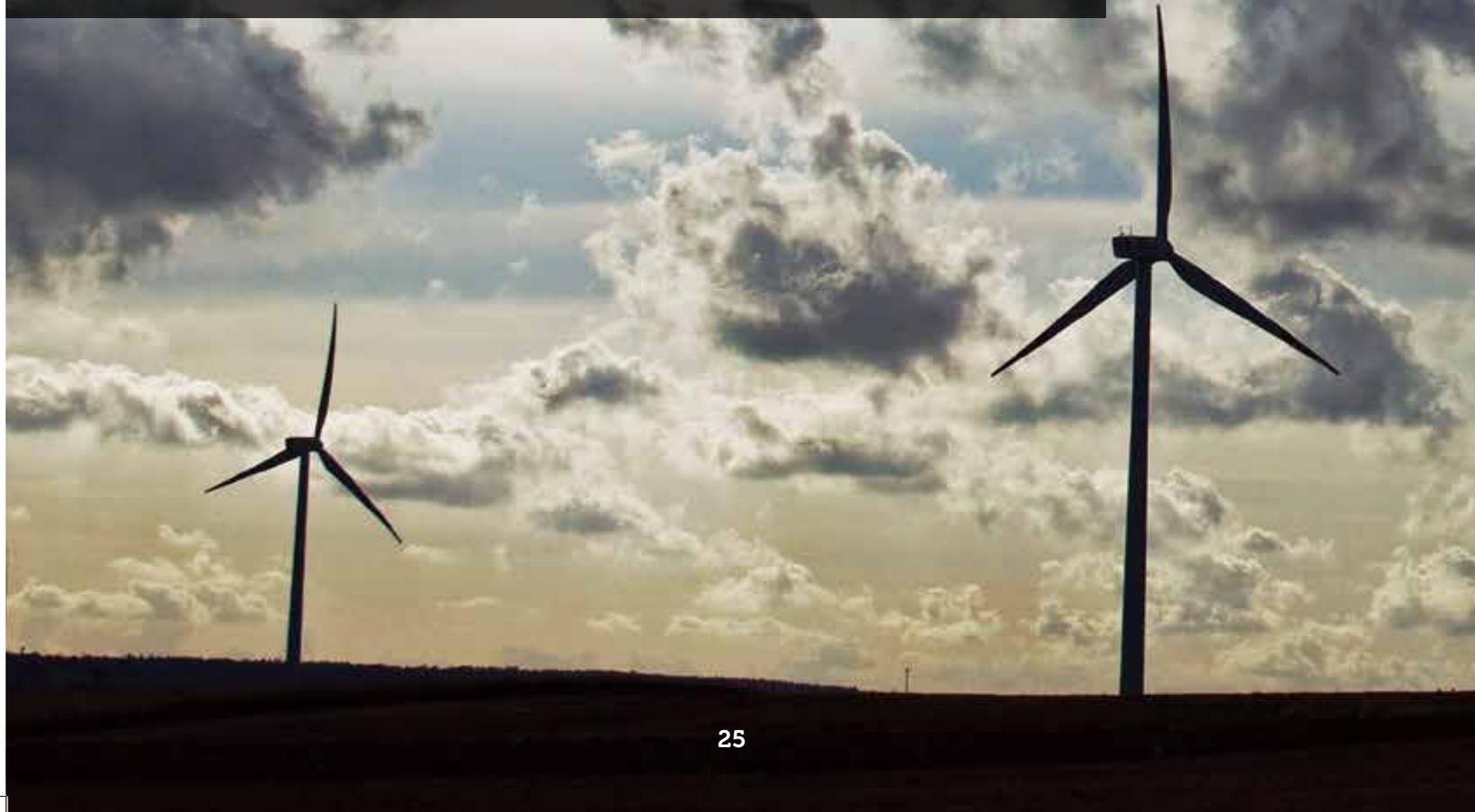
- At the same time, it is expected to accelerate competition, and thus ensure efficiency in other distribution routes.
- In addition, a link between prices in the producing districts and consumer prices will be possible. The government plans to continuously monitor the status of price links through consumer groups.

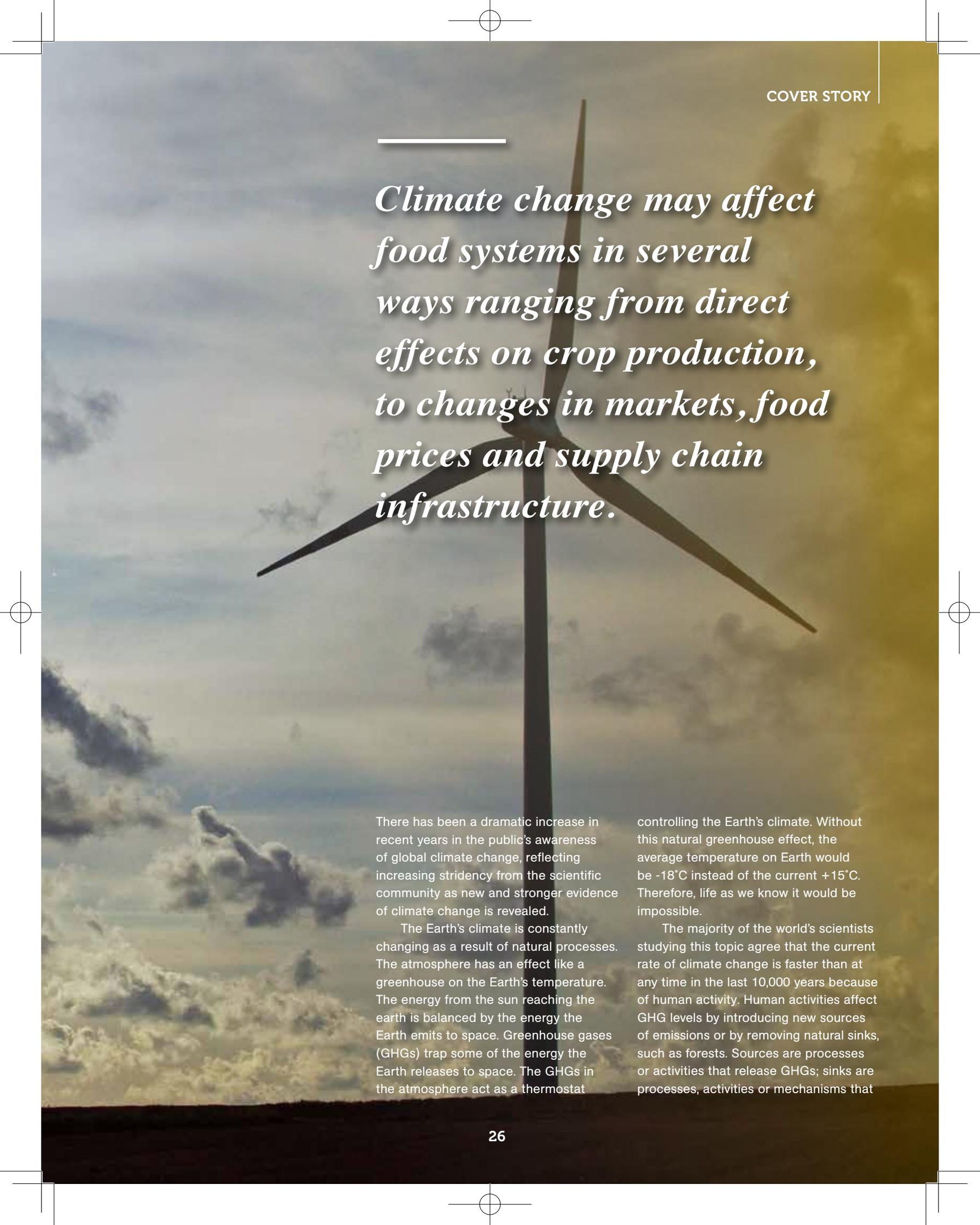
Expansion of fixed price and free contract trading activities in wholesale markets is anticipated to decrease price fluctuations for agricultural products.

The implementation of a supply-demand stabilization system based on accurate observation data and the supply-demand policy established through agreement among stakeholders, producers, and consumers, is expected to result in a reduction of the price fluctuation rates for napa cabbage, radish, chili pepper, garlic, and onions, items commonly consumed in Korea, by approximately 10% over the previous month.

The government will continuously implement inspection, assessment, and feedback regarding policy implementation through private-public cooperation so that all of Korea can benefit from the policy implementation outcome.

CLIMATE CHANGE & FOOD INDUSTRY





Climate change may affect food systems in several ways ranging from direct effects on crop production, to changes in markets, food prices and supply chain infrastructure.

There has been a dramatic increase in recent years in the public's awareness of global climate change, reflecting increasing stridency from the scientific community as new and stronger evidence of climate change is revealed.

The Earth's climate is constantly changing as a result of natural processes. The atmosphere has an effect like a greenhouse on the Earth's temperature. The energy from the sun reaching the earth is balanced by the energy the Earth emits to space. Greenhouse gases (GHGs) trap some of the energy the Earth releases to space. The GHGs in the atmosphere act as a thermostat

controlling the Earth's climate. Without this natural greenhouse effect, the average temperature on Earth would be -18°C instead of the current $+15^{\circ}\text{C}$. Therefore, life as we know it would be impossible.

The majority of the world's scientists studying this topic agree that the current rate of climate change is faster than at any time in the last 10,000 years because of human activity. Human activities affect GHG levels by introducing new sources of emissions or by removing natural sinks, such as forests. Sources are processes or activities that release GHGs; sinks are processes, activities or mechanisms that



remove GHGs.

Since the industrial revolution, concentrations of GHGs have been increasing steadily as a result of industrialization (increasing sources of emissions) and deforestation (declining sinks). Between 1970 and 2004 several key GHG emissions, including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphurhexafluoride (SF₆), increased by 70%. The scientific evidence for this is very solid. In its fourth assessment report since 1990, the Intergovernmental Panel on Climate Change (IPCC) concluded that climate change is already happening and can be primarily attributed to human activity.

Global climate change will have substantial impacts on the environment including water resources, fisheries,

forests, wildlife and ecosystems. Regional climate changes, particularly temperature increases, are already affecting different natural systems on all continents and in some oceans. Scientists also predict that climate change will increase climate variability.

Key Predictions

The impacts of global climate change on food systems are expected to be widespread, complex, geographically and temporally variable, and profoundly influenced by preexisting and emerging social and economic conditions.

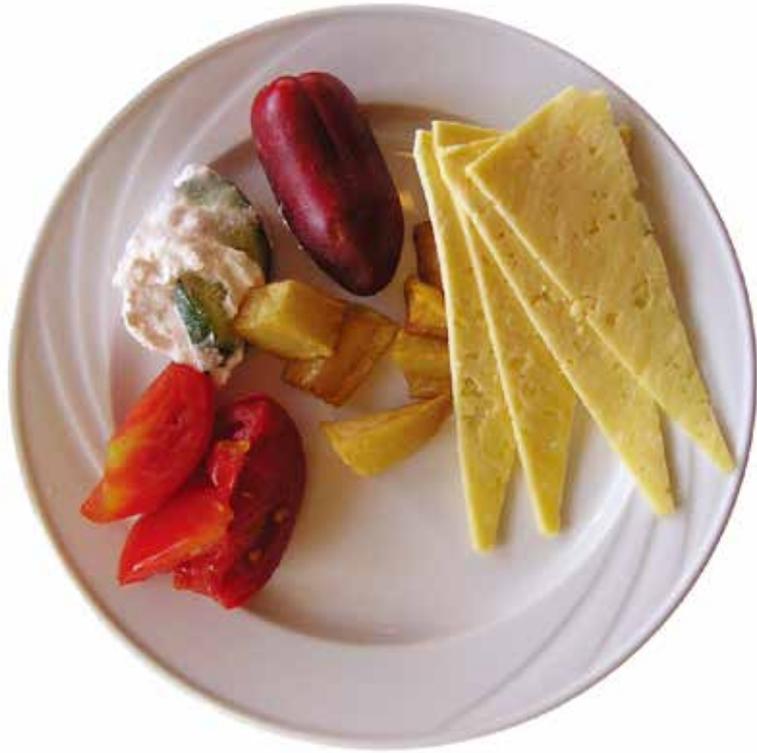
Some of the key findings of a recent report by Universal Ecological Fund (Fundación Ecológica Universal FEU-US) make for interesting reading. FEU-US is a non-profit, non-governmental organization that seeks to increase awareness that encourages actions on sustainable

development issues through researching, analyzing, producing and disseminating information.

Its report, "The Impacts of Climate Change on Food Production: A 2020 Perspective" notes the following:

1. The temperature of the planet would increase by, at least, 2.4°C above pre-industrial times.

Carbon dioxide (CO₂) is the most important man-made greenhouse gas. In 2008, CO₂ levels reached 385.2 parts per million (ppm). With current increase rates of about 0.5% per year, CO₂ levels could reach 410 ppm in the next decade. These levels correspond to greenhouse gases (GHGs) concentrations above 490 ppm CO₂-equivalent (all greenhouse gases combined). This equals a 2.4°C increase in global temperature above pre-industrial times.



2. Two of the three main elements of food production –water and climate– would be most affected by climate change.

Obtaining more land suitable for agricultural production is unlikely. It is therefore water availability (mainly in the form of rain, on which 80% of food production depends) and climate conditions, which would most significantly impact food production worldwide, with both positive and negative impacts.

3. The most significant impacts of climate change on food production would be on:

- The tropical region –the region between 30° N and S of the Equator– due to reduced water availability and increased temperatures.
- The temperate region –between 30° and 60° N and S–due to changes in precipitation.

4. Positive and negative impacts of climate change by region include:

- **Africa:** The region with the most severe expected impacts. About two-thirds of arable land in Africa is expected to be lost by 2025. Decreased rainfall would also impact yields from rain-fed agriculture, with estimations of up to 50% in some countries. A combination of increased temperature and rainfall changes would lengthen the growing season benefiting, for example, the production of Ethiopian coffee.
- **Asia:** The most serious potential threat arising from climate change in Asia is water scarcity. Central and South Asia would experience negative impacts, while the impacts on East and South-East Asia would be beneficial. The two most populated countries in the world would experience different impacts –India with negative impacts, and China with positive impacts.
- **Europe:** Climate-related increases in crop yields, of about 5% in wheat, are expected mainly in northern Europe; while the largest reductions of all crops, of up to 10%, are expected in the Mediterranean region.
- **Latin America and the Caribbean:** Overall yield production of wheat, rice, maize, and soybean is estimated to decrease by 2.5 to 5%. The impact of climate change in Latin America's productive sectors is estimated to be a 1.3% reduction in the region's GDP for an increase of 2°C in global temperature
- **Northern America:** Overall, decreased precipitation will create important problems for the United States, restricting the availability of water for irrigation and at the same time increasing water demand for irrigated agriculture. This would affect in particular the western region of the United States; some yield increases are expected in the Great Plains.
- **Oceania:** As a result of reduced precipitation, water security problems are very likely to intensify,





and change land use away from drier areas. This would negatively affect Australia in particular, the major food producing country in the region.

5. The amount of food estimated to be produced in the next decade would not be enough to meet the food requirements of an additional 890 million people estimated to inhabit the world in the next decade.

– Global wheat production vs. demand:
14% deficit

Countries with expected increase in production: China, United States, Canada and Argentina. Countries with expected decrease in production: India, Egypt, Russian Federation, Ukraine, Italy, Pakistan, France, Germany, Iran, Romania, Australia, Turkey, United Kingdom, Kazakhstan, Poland and Spain.

– Global rice production vs. demand:
11% deficit

Countries with expected increase in production: China, United States, Indonesia, Vietnam, Philippines, Japan, Thailand, Myanmar, Cambodia, Republic of Korea, Lao Peoples Democratic Republic.

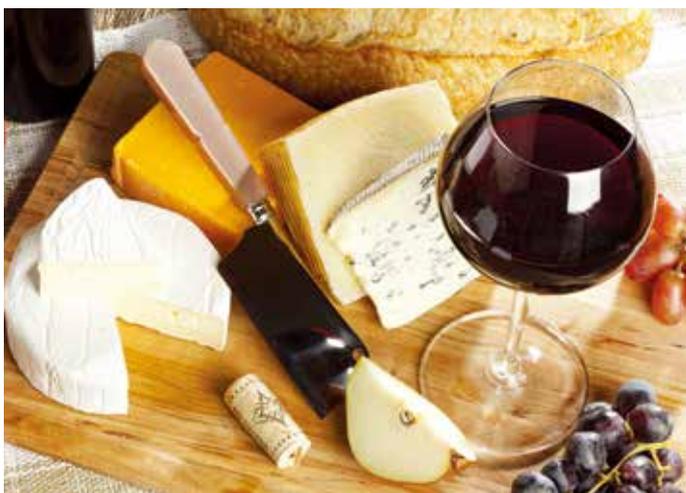
Countries with expected decrease in production: India, Brazil, Egypt, Nigeria, Pakistan, Bangladesh, Nepal, Sri Lanka, Madagascar.

– Global maize production vs. demand:
9% deficit

Countries with expected increase in production: China, United States, Indonesia, Canada and Philippines. Countries with expected decrease in production: India, Brazil, Egypt, Nigeria, Russian Federation, Ukraine, Italy, Argentina, France, Germany, Romania, South Africa, Mexico, Hungary and Serbia.

– Global soybean production vs. demand:
5% surplus

Countries with expected increase in production: China, United States, Indonesia, Brazil, Canada, Argentina, Vietnam, Japan, Serbia, Paraguay, Bolivia, Uruguay and Democratic People's Republic of Korea.



Countries with expected decrease in production: India, Nigeria, Russian Federation, Ukraine, Italy, Iran and South Africa.

6. As a result of decreased availability of food, prices could increase up to 20%. The inevitable consequence would be the increase in the share of hunger, which could reach one in every five people. The current level of undernourishment in the world is 1 billion people –one in every seven is hungry today. Currently, about 6.5 million children under five die every year of malnutrition and hunger-related diseases –about 18,000 deaths a day.

Within the next decade, these figures could almost double, reaching one in every five people being hungry. At least every other newborn in Africa; one in every four newborns in Asia; and one in

every seven newborns in Latin America and the Caribbean would be sentenced to undernourishment and malnutrition.

Impacts on the Agricultural Sector

Agriculture and fisheries are highly dependent on specific climate conditions. Trying to understand the overall effect of climate change on our food supply can be difficult. Increases in temperature and carbon dioxide (CO2) can be beneficial for some crops in some places.

But to realize these benefits, nutrient levels, soil moisture, water availability, and other conditions must also be met. Changes in the frequency and severity of droughts and floods could pose challenges for farmers and ranchers. Meanwhile, warmer water temperatures are likely to cause the habitat ranges of many fish and shellfish species to shift,

which could disrupt ecosystems. Overall, climate change could make it more difficult to grow crops, raise animals, and catch fish in the same ways and same places as we have done in the past. The effects of climate change also need to be considered along with other evolving factors that affect agricultural production, such as changes in farming practices and technology.

As noted by Dr. Kim Chang-gil of the Korea Rural Economic Institute in a recent research paper, agricultural production is carried out through the selection of crops suitable for the climate of a specific region and application of proper farming methods. Therefore, agriculture is a climate dependent bio-industry with notable regional characteristics.

The publication “The Impact of



Climate Change on the Agricultural Sector: Implications of the Agro – Industry for Low Carbon, Green Growth Strategy and Roadmap for the East Asian Region,” was prepared as a background policy paper for the East Asia Low Carbon Green Growth Roadmap project with funding from the Korea International Cooperation Agency (KOICA), under the East Asia Climate Partnership.

“Climate change disturbs the agricultural ecosystem, resulting in the change in agricultural climatic elements such as temperature, precipitation, and sunlight, while further influencing the arable, livestock, and hydrology sectors.”

First of all, the impacts of climate change on the arable and livestock sector are made known by biological changes including the change of flowering and harvesting seasons, quality change, and

shift of areas suitable for cultivation. Climate change affects the agricultural ecosystem, giving rise to blights and pests and causing population movement and change in biodiversity. In the livestock sector, climate change brings about biological changes in areas such as fertilization and breeding and also affects the growing pattern of pastures.

Climate change affects the hydrology including underground water level, water temperature, river flow, and water quality of lakes and marshes, by impacting precipitation, evaporation, and soil moisture content. In particular, the increase of precipitation by climate change leads to an increase of outflow while the temperature rise increases evaporation, resulting in the reduction of outflow, Dr. Kim notes.

Negative impacts of global warming

include reduced crop quantity and quality due to the reduced growth period following high levels of temperature rise; reduced sugar content, bad coloration, and reduced storage stability in fruits; increase of weeds, blights, and harmful insects in agricultural crops; reduced land fertility due to the accelerated decomposition of organic substances; and increased soil erosion due the increased rainfall.

In addition, each crop requires different climate and environmental conditions to grow. So, if climate change like temperature rise occurs, the boundary and suitable areas for cultivation move north and thus the main areas of production also change. The change in the main areas of production might be as a crisis for certain areas but might be an opportunity for other areas,





so it cannot be classified either as a positive or as a negative impact.

“In sum, the impacts of climate change on the agricultural sector have ambivalent characteristics of positive impacts creating opportunities and of negative impacts with costs. Therefore, it is very important to formulate adaptation strategies that can maximize the opportunities and minimize the costs that will lead to sustainable agriculture development.”

Food Industry

Beyond the physical impacts of climate change lie a range of market risks and opportunities that are being driven by changing consumer preferences, supply chain demands and government policies – all in response to the challenge of climate change.

Consumers are becoming increasingly interested in the environmental credentials, amongst other things, of the food and beverage products they buy. This is consistent with a broad

and global trend in which consumers are demanding higher standards of quality, transparency and accountability in food and beverage products. This trend can only continue.

As a consequence food-processing companies have to take the effects of emissions from their operations on climate into account.

This may be achieved by energy conservation and substitution of fossil fuels with renewable energy sources in the day-to-day running of their operations. In this context the ideas and concepts proffered here apply mainly to small and medium sized enterprises.

It is worth noting as well that investment in applications to achieve significant energy reduction requires speedy pay back as most companies now have to contend with cutthroat competition due to the financial crisis worldwide and indeed the continuing recession.

Climate change as a result of human activity further exacerbates the problem

and now directly affects the development of existing and new food processing facilities.

The renewal of existing facilities in energy conservation terms by 'retro-fitting' largely depends on what has gone before whereas the planning of new facilities in terms of location, construction design, utility requirements such as energy, water utilization / waste management and packaging recycling can be more strategically planned.

In dealing with the emerging issue of climate change and its potential negative consequences manufacturers have now to be much more proactive. Previously manufacturers that were proactive in the area of utility savings over the past 30 years did so primarily for economic or bottom line reasons.

What can be done?

As noted by Dr. Kim in his paper, in order to accomplish green growth in the agricultural sector, we should create an innovative way to turn inconvenience

into a growth engine by leaving existing convenience and inertia behind, and by achieving a shift in thinking among relevant parties, to ensure that inconvenience and hazard can be properly managed.

"For this to happen, an amicable atmosphere should be created with a bold paradigm shift, where the suggestion of various ideas and active discussion can take place."

First of all, he notes, it is urgent that we come up with an implementation strategy that allows us to maintain the unique characteristics of agriculture as a green industry, and thereby eventually achieve green growth by actively developing public functions, such as atmospheric purification and environmental protection through agricultural production innovation and clean technology.

"It is particularly necessary to establish green governance where all farmers, relevant organizations and policy makers concerned can work together,

where a strong will to implement green growth and an effective execution system are required to accomplish green growth. However, the policy to promote environmentally friendly agriculture itself is not enough to ensure an assured transition toward a low-carbon agricultural system, but reorganization of the overall agricultural system is needed."

Above all, agricultural policy and low-carbon environmental policy should be properly integrated so that the concept of green growth in the overall agricultural sector takes root.

In order to maximize the policy effectiveness through a proper combination of policy instruments in various relevant sectors, a green innovation system should be established where policymakers, researchers, relevant organizations, farmers and other relevant bodies can have proper understanding of green growth and share their roles.

In addition to that, Dr. Kim observes that a systematic stage-by-stage strategy to develop technology should be devised





and implemented on a steady basis so that green technology reduction or absorbing of greenhouse gases in the agricultural sector can be utilized as a growth engine.

“When green growth in the agricultural sector is successfully implemented, agriculture will solidify its position not only as a green industry that manages national land in an environmentally sustainable manner but also as a life industry that supplies safe agricultural products and manages national greenhouse gas emissions.”

As for the food industry, the key is to be prepared. The findings of a report: “Impact of Climate Change on Tasmania’s Food and Beverage Industry” prepared by Pitt & Sherry could equally hold for the food industry across the world.

It notes that the industry needs to be first aware of the likely consequences, physical and financial, of climate change.

“At a minimum, or as part of a risk assessment process, businesses should document their ‘carbon footprint’

and understand the extent to which that footprint creates risks and/or opportunities for their products. Assessing these risks and opportunities requires a market-by-market approach, particularly for exported produce.”

For those businesses with a low carbon footprint, or the ability to achieve this cost effectively, there may be market advantage in disclosing this information to consumers or supply chain partners. The attractiveness of this will depend in part on product positioning and the prospects for gaining market premiums.

“For all businesses, there is almost certainly advantage to be gained by reducing their greenhouse emissions to the greatest extent possible: the business case should consider not only direct exposures, such as energy and transport costs, but also supply chain linkages, future policy settings, market risks and corporate/brand positioning.

Where a high standard of proof is required – whether to meet market, legal or corporate expectations – full life cycle

assessment of a product’s environmental characteristics may be justified. Despite the availability of software tools to assist with this process, it can involve significant costs. A risk-managed approach might therefore see such assessment reserved for products believed to possess above-average exposure or, conversely, potential to attract premiums. Assessments could be undertaken on behalf of a whole industry or product class by the relevant industry association.

As the information that such assessments will bring to light will also be valuable to governments, to help identify needs and opportunities for targeted assistance and/or investment promotion, there is a prima facie case for government support for this work. At the same time, businesses must remain accountable for determining their own response to climate change and accept the consequences should they choose not to engage actively in managing the issue, the report notes.

MEASURES TO BUILD A CREATIVE ECONOMY

The Korean Government recently announced comprehensive measures to increase the productivity of small and medium enterprises.



**MINISTRY OF
STRATEGY
AND FINANCE**





The economy is facing a low-growth era and market competition is intensifying every day while major advanced countries are pouring out numerous measures to enhance productivity to achieve job creation and competitiveness reinforcement. The productivity of Korean SMEs, however, currently stands at about one third of that of large corporations. The government had developed and executed comprehensive measures to tackle this issue in the past, but the effects of such measures are still insufficient. Shifting from the past input-driven approaches, the government developed measures that would help productivity enhancement, such as new market development, commercialization of technology items, to name a few. These measures are intended to translate productivity enhancement into fundamental competitiveness reinforcement.

Detailed Initiatives

Reinforcing Tech. Development & Production Capabilities of SMEs

Reinforcing SME's Tech. Development Capabilities

The government will increase its funding for technology development of SMEs from the current 12.4% of the R&D budget up to 18% by 2017. It will also draft a bill mandating that SMEs are given the first choice when transferring technologies developed by universities or institutions with the government funding to the private sector.

It will also make it a mandatory for government-funded institutions to allocate a certain percentage of their budgets to R&D cooperation with SMEs, such as joint research, technological advisory and technology transfers. Also 'SME Technology Development Support

Centers' will be designated for each business type and run accordingly.

The government will create an environment where innovation failures are tolerated. Specifically, government will give penalty exemptions to SMEs that have carried out research studies faithfully but failed to reach the final goal. When venture capitals invest in technology development of SMEs, they will be given more leeway in technology development reviews and the documents required for submission will be simplified. Also the government will build 'R&D clusters' within universities that accommodate R&D functions of SMEs so that SMEs could jointly with universities conduct studies using university resources such as devices and human resources.

Developing and Retaining Skilled Workers

The government will support SMEs in their recruitment and training of



talented workers. As a part of its plan, the government will offer scholarships to university students as an incentive to join SME upon graduation to foster customized workforce for SMEs through on-the-job trainings while encouraging students to focus on their academic achievement without any worries of getting a job. In addition, the government will develop a mechanism that allows students with technical specialties develop their skills further while serving their military service and be recruited by related SMEs later when they are discharged.

For the economically vulnerable youth with no specialties, the government will run training programs to help them to serve in the military as technical specialists and work at SMEs after being discharged.

It will also support SMEs in utilizing skilled workers and standardizing work process. With the help of skilled workforce, SMEs will be able to offer

organized on-the-job training to new hires and build an expertise transfer mechanism, with which know-how of skilled workers will be compiled and disseminated. The government will tap into the pool of retirees from large corporation R&D centers to offer technical guidance on tackling the difficulties that SMEs face while doing day-to-day operations

The government will facilitate the know-how transfers on productivity enhancement and augment training programs on management of technology. In particular, the government will run 'Productivity Enhancement Programs' in connection with visits to best practice companies and increase management of technology courses in graduate schools for CEOs of SMEs. For employees of SMEs, the government in partnership with large corporations will open an 'Academy of Technology Collaboration' and offer overseas training opportunities. In addition, the government will help SMEs

recruit and retain excellent workforce by introducing 'SME-type Stock Options Scheme,' in which an employee of an SME receives a certain amount of money that the company and employees have saved up as incentive when he/she stayed with the company for over a certain period of time.

Creating Smart & Safe Production Site

To create a safe production site, the government will help SMEs apply information and communication technologies (ICT) to manufacturing operations for digitalization. For SMEs that lack the resources to maintain information system, the government will support them with cloud-based digitalization, which requires no separate brick-and-mortar.

The government will create a pleasant and highly efficient working environment for SMEs by helping them upgrade or automate their manufacturing

facilities or improve product lines or manufacturing process on their own or through partnership with specialized production research centers.

With regard to the financial support for production line upgrade or automation, the government will increase facility investment fund from current 3 trillion won to 5 trillion won and offer special guarantees for SME funds that are spent for manufacturing process improvement using ICT or new technologies. In addition, the government will open an online intermediary marketplace (www.joongomall.or.kr) which will allow SMEs to quickly sell non-operating assets.

Supporting Commercialization & Market Creation

Building an Ecosystem Conducive to Technology Commercialization

The government will build an ecosystem in which SMEs commercialize promising

technologies; universities and research institutions develop technologies for technology transfers; and large companies invest in promising SMEs or buy promising technology products from SMEs. It will also improve procurement systems to ensure that excellent products of SMEs are successfully introduced to markets. In case of SME products developed for government procurement, the government will purchase them through private contracts and offer supports necessary for overseas market entry.

Increasing Successful Commercialization of New Technologies

The government will increase financial support for the commercialization of new technologies. As a part of its plan, it will introduce intellectual property-based financing scheme and expand credit lines for SMEs based on technology evaluation. It will also run special funding programs for SMEs with successful R&D results in partnership with private financial institutions.

Furthermore, the government will expand development support for technologies that are demanded by large companies. In partnership with large companies, the government will continuously increase 'Public-Private Cooperation Fund' used for SME's technology development. The number of companies contributing to fund and the fund amount will respectively increase from the current 22 and 438 billion won to 50 and 1 trillion won by 2017. The government will ensure that the technology development funds are effectively utilized by checking whether or not large companies made purchases as promised. The government will tap into the overseas network of KOTRA to aggressively develop prospective overseas buyers.

SMEs will be encouraged to develop product designs from product planning stage rather than before product marketing stage to ensure good designs enhance added value of the products.

Creating New Markets Abroad

The government will offer overseas





market entry support tailored to the capability of SMEs.

For promising businesses, the government will help them tap into the overseas private network including large companies and Korean Chamber of Commerce to facilitate their global market entry. For green businesses, the government will offer consulting supports to help them conduct business feasibility study of foreign green projects or win supplier contracts. SMEs whose productivity continues to fall, will receive support from the government in exporting technology and setting up local production base in underdeveloped market.

Using ODA projects, such as 'Economic Development Cooperation Fund', the government will supply and disseminate 'appropriate technologies' that are fit to the local situations or are necessary for the poor people of the developing nations to help SMEs export necessary technology or make inroad into niche markets.

Creating Synergies through Convergence and Cooperation

Creating New Markets through Technological Convergence

The government will promote technological convergence to create new markets. As a part of its plan, it will support new technology and product development by converging information technology, biotechnology and Nano-technology etc. and offer loan guarantees and funds for their successful commercialization.

It will also increase the number of 'Convergence Support Centers for SMEs' from the current 6 to 12 nationwide to offer support ranging from item development and planning to convergence expertise transfers.

Strengthening Cooperation between Large Corporations and SMEs

The government will encourage large corporations and SMEs to improve production environment by conducting a

campaign so-called 'Industry Innovation Movement 3.0' where large companies and their first-tier suppliers support innovation activities of their sub-contractors for productivity enhancement.

The government will compile and spread best practices of shared growth, such as joint job competency trainings, transfer of unused technologies to build a mutually beneficial environment for large companies and SMEs.

The government in partnership with large companies will strengthen quality innovation training of second or lower-tier suppliers to enhance productivity.

Another initiative of the government is building a market order where productivity enhancement efforts are rewarded. In this context, it will gradually increase the scope and number of companies inspected for consignment transactions from the current 3,000 to 10,000 by 2017. The government will lay legal and systemic frameworks to prevent technology leaks. Specifically, the government will streamline laws



and regulations regarding protection of SME technologies. It will also increase the technology escrow accounts from the current 7,000 to 19,000 by 2017 and expand the scope of technologies required to use escrow service. The government will help SMEs with high technology leak risks install security software solutions and foster internal security experts.

It will increase support for companies suffering from technology leaks while strengthening the punishment for offenders. As a part of its efforts, the government will strengthen the regulations on the reporting of technology misuse by sub-contractors and increase penalty surcharges while beefing up the response capability of the damaged companies through legal advisory supports.

Boosting Cooperation among SMEs

The government will help SMEs reduce production cost by setting up 'joint raw material sourcing centers' to maximize the

benefits of volume purchases. In addition, it will offer funding for raw material joint sourcing as well as purchase guarantees for SME cooperatives experiencing temporary credit crunch.

Business associations or unions will build Association Society Standards (ASS) and develop technology roadmap with the support from the government to ensure that specification of strategic products, including quality, function, shape and size are standardized.

Strengthening Customized Support & Policy Monitoring

Building a Customized Support System

The government will build a support system tailored to the characteristics of a business by addressing issues that prevented seamless support. Specifically, it will expand the operation of the so-called 'SME Health Management System' to tackle issues from the perspective of customers. Also the pool of productivity experts will be enlarged and be utilized

in connection with advisory services, information support as well as facility funding. It will also track and analyze the changes of business productivity to identify areas of improvement and best practices found in the private sectors will be spread to SMEs.

Developing Continuous Policy Monitoring Systems

The government will set up a dedicated policy monitoring team within the Small and Medium Business Administration to manage and monitor productivity boosting policy implementation at all times.

Identifying and Tackling Unreasonable Regulations

In cooperation with related agencies, the government will constantly identify and rectify regulations that prohibit productivity enhancement.

i Source: Ministry of Strategy & Finance
www.mosf.go.kr

ORGANIC LEADER





SunOpta Inc. is a leading global company focused on natural, organic and specialty foods products. The Company specializes in sourcing, processing and packaging of natural and organic food products, integrated from seed through packaged products; with a focus on strategically significant vertically integrated business models.

Demand for healthy food alternatives continues to grow as a result of many long-term trends including: an increased interest in health and wellness as consumers better understand the correlation between diet and health; an aging population and expected increases in health care costs; the increasing prevalence of diseases of the heart, cancer and diabetes; the rapid rise in obesity; and the demand for products produced using socially responsible practices, to name but a few.

SunOpta Inc. is a leading global company whose core natural and organic food operations focus on value-added grains, fiber and fruit based product offerings, supported by a global infrastructure.

Headquartered in Canada and founded in 1973, the company has two non-core holdings, a 66.1% ownership

position in Opta Minerals Inc., listed on the Toronto Stock Exchange, a producer, distributor, and recycler of environmentally friendly industrial materials; and a minority ownership position in Mascoma Corporation, an innovative biofuels company.

The company takes pride in bringing well-being to life and is confident that its integrated "field to table" product portfolio complements healthy living and healthy eating, thus positioning SunOpta for an exciting and prosperous future.

The company is focused on three core strategies, which include, becoming a pure-play natural and organic foods company; aggressively growing its value-added consumer packaged foods and ingredients portfolios; and leveraging its integrated natural and organic foods platform.

SunOpta Foods has been built through

business acquisitions and significant internal growth. It operates in the natural, organic and specialty foods sectors and utilizes a number of integrated business models to bring cost effective and quality products to market. It has four main operating segments: Grains and Foods, Ingredients, Consumer Products and International Foods.

Its long-term strategy is to leverage the platform that has been developed via implementation of continuous improvement principles, new product development and a focus on value-added components of the business, and to continue to pursue selective acquisitions that align with the value-added components of our integrated business models.

We believe that the natural, organic and specialty foods markets offer solid long-term growth opportunities as consumers focus on health and wellness and see diet as a key part of a healthy lifestyle.

Grains and Foods Group

The Grains and Foods Group specializes in marketing organic, identity preserved, and non-GMO grains, ingredients, packaged goods and processing services with a core focus on soybean, sunflower and corn products. The Group works to ensure that it provides its customers with high quality organic, non-GMO and IP specialty grains and seeds by serving as a grower's supplier of seed; purchaser of the grower's specialty crops; and processor and packager of a wide range of grains-based ingredients and consumer-packaged products. This 'field to table' approach allows the Group to meet the specific needs of domestic and foreign food manufacturers and processors, by providing products in the varieties and quantities needed in a timely and cost effective manner.

The main products include:

- A wide variety of IP, non-GMO and organic seeds and whole grains including soy, corn and sunflower



for food applications offering premium varieties with superior food quality. The integrated model results in control at every stage of production, from seed selection and growing through storage, processing and transportation.

- Organic, non-GMO and IP grain-based ingredients, including: Raw material sourcing and processing of soy based ingredients in liquid, spray-dried and roasted formats; Grain-based ingredients which utilize non-GMO and organic soy, corn, sunflower and rice; specialty organic functional ingredients, including maltodextrins, tack blends, fiber products; flavor enhancing products, including snack coatings, cheese powders and flavor systems; an innovative line of organic dairy ingredients; and organic soy and sunflower oils.
- A variety of packaged food products for retail and foodservice use, including:

A wide variety of private label packaged products for retailers and consumer foods companies, including aseptic and refrigerated soy, rice, almond, sunflower and other alternate beverages; aseptic broths and teas; frozen edamame and vegetable blends; and roasted grains-based snacks.

- Branded food products under the Sunrich Naturals brand, including: Alternative beverages – a variety of soy, rice, almond and sunflower based beverages for retail and foodservice.
- A variety of frozen edamame and vegetable blends for health food stores, foodservice operators and retail outlets.
- Healthy, non-GMO and organic snacks to schools, retailers and healthcare facilities throughout North America. Products include in-shell sunflower and sunflower kernels, and roasted corn and soy snacks.

- A full range of bulk grain-based animal feed and pet food products. The premium feed products originate from select organic and non-GMO soy, corn, sunflower and other grains.

The Grains and Foods Group also engages in processing and contract manufacturing services and offers a comprehensive range of services including basic grain cleaning, ingredient processing, custom roasting, and retail-ready packaging. With processing facilities throughout the U.S., plus a number of storage and office facilities, it can handle a range of order sizes, including barge lots, rail cars, bags, pallets, and retail packages.

Ingredients Group

The Ingredients Group is focused primarily on fiber products and specialty fruit ingredients. It works closely with its customers to identify product formulation, cost and productivity opportunities aimed at transforming raw materials into value-





added food ingredient solutions.

The Ingredients Group's products include:

- Fibers and brans, including Canadian Harvest®, Oat Fiber, SunOpta® Soy Fiber, SunOpta®, Rice Fiber, SunOpta®, Cellulose Fiber and SunOpta® Pea Fiber brands of insoluble organic and conventional fiber products, Barley Balance™ soluble fiber, MultiFiber™ blends, value-added starch-based texturizers, and a number of custom processed ingredients. The Ingredients Group's family of insoluble fiber products is derived from oat, soy, pea and rice hulls. In addition, the Ingredients Group provides two gluten-free cellulose fibers, which are highly concentrated sources of insoluble dietary fiber. These products are used commercially to increase the fiber content of cereals, breads, cookies and crackers; to increase yield and enhance texture in ground and processed meat products; and to add strength and reduce breakage in baked products.

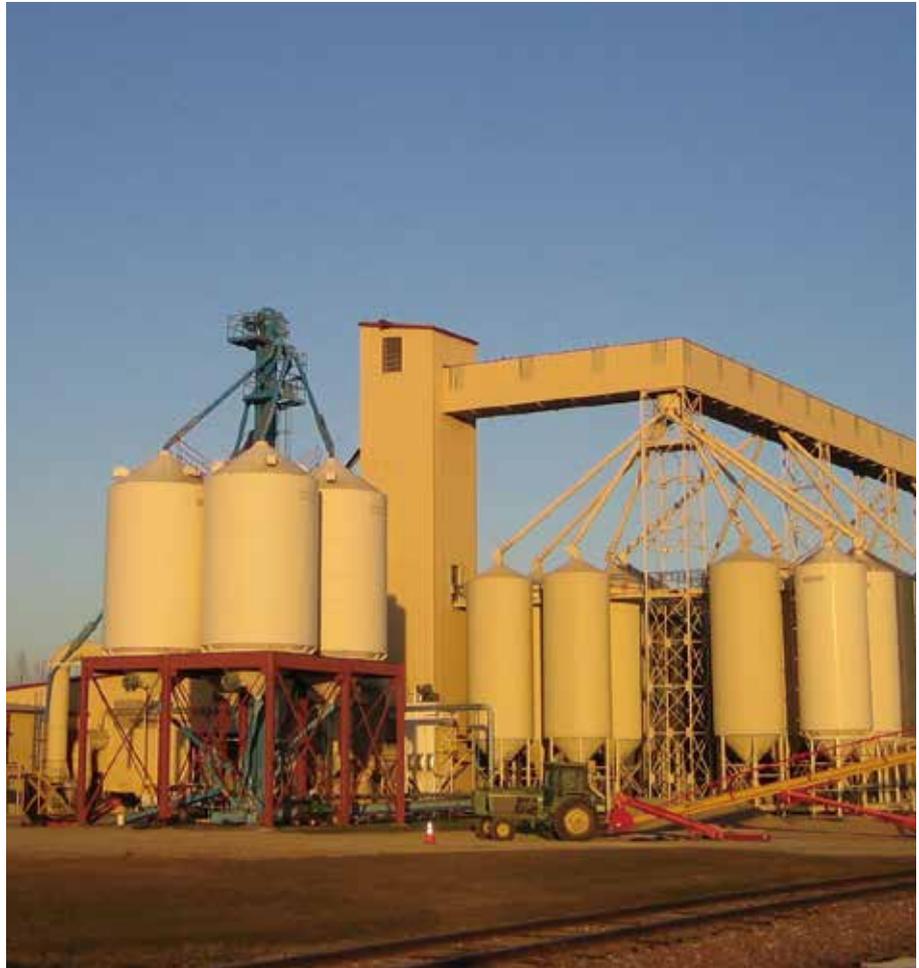
The Group also provides highly functional fiber blends for specific applications under the MultiFiber brand

name and offers Canadian Harvest® Stabilized Brans derived from oat, wheat and corn, as well as wheat germ. The stabilized brans are heat-treated to extend shelf life and ground to meet customer needs for appropriate particle size.

- SunOpta® Specialty Starch products, including OptaGrade® and OptaMist®. OptaGrade is a natural, starch-based texturizing agent that is used commercially in a variety of dairy products including natural, imitation, and processed cheeses, sour cream, cream cheese, cottage cheese and yogurt. OptaMist is also a starch-based texturizing agent that improves the taste, texture and appearance of dairy products, yogurt, cheese products, and salad dressings.
- Value-added fruit-based ingredients in aseptic and conventional formats, which are custom formulated to provide unique flavor and texture profiles for a wide range of specialized applications. Applications include fruit for yogurts, ice creams, cheeses, smoothies, shakes, frozen desserts, bakery fillings, health bars, various beverages, dressings, marinades, dips and sauces.

The Group also produces a number







of unique functional food ingredients, and offer services to customers on a contract basis utilizing proprietary technologies.

Consumer Products Group

The Consumer Products Group provides natural and organic consumer packaged food products to major global food manufacturers, distributors and supermarket chains with a variety of branded and private label products.

The Consumer Products Group's products include:

- Conventional and organic beverage processing and re-sealable pouch filling solutions in a variety of product categories, including shelf stable and refrigerated juices, frozen fruits and vegetables, specialty beverages, vitamin waters, electrolyte waters,

- energy drinks, soups, baby food, and healthy fruit and vegetable based snacks in flexible pouches.
- Nutritious healthy snacks including natural and organic fruit-based snacks in bar, twist, rope and bite size shapes, with the ability to add a variety of ingredients including fiber, plus a range of baked and extruded nutrition bars using a wide variety of ingredients including grains, proteins and other ingredients.
- Individually Quick Frozen natural and organic frozen fruits and vegetables, including strawberries, blueberries, raspberries, peppers and many other items.

International Foods Group

The International Foods Group includes

European and North American based operations that source and supply raw material ingredients and trade organic commodities.

Its principal operations are located in Amsterdam, the Netherlands and Santa Cruz, California and comprise the global sourcing and supply operations of Tradin Organic, including a business in Dalian, China that supplies food grade organic soybeans, feed, organic sunflower kernels and other grains and distributes certain organic food products, as well as sourcing and processing operations in Ethiopia for organic and specialty coffees and organic and conventional sesame seeds. In addition, the International Foods Group is expanding its integrated processing capabilities with the construction of its value-added organic and specialty cocoa



facility in the Netherlands.

The International Foods Group sources raw material ingredients from approximately 60 countries around the world, and is one of the largest suppliers of a wide range of organic commodities to the food industry in the European, North American and Asian markets. It sources organic fruit and vegetable based ingredients, sweeteners, cocoa, coffee, grains, nuts, seeds and pulses and other organic food products from virtually every continent to ensure quality of supply, minimize crop risk and provide contra-seasonal solutions to its customers. In many cases, the International Foods Group will enter into exclusive arrangements with growers and/or processors of key strategic commodities to control the reliability of its supply chain.

In an email interview to us, Mr. Curt Petrich, General Manager, Northern Grains division at SunOpta, said that the company is committed to the health and well-being of its customers, communities and the environment.

“We will continue to expand our global platform by providing healthy products that bring well-being to life. We are confident that our 'field to table' product portfolio complements healthy living and healthy eating, thus positioning our Company for an exciting and prosperous future,” he said.

Mr. Petrich was involved in production agriculture for 30 years, in 2000 he was an owner of a Identity Preserved value added company that exported IP non-GMO and organic beans. In 2005 their company became part of SunOpta. In terms of expanding operations this year, he noted that the key agendas for SunOpta would be to expand sales of consumer packaged goods, ingredients for food applications, raw grain both domestically and internationally and finally to expand the company’s sourcing capabilities throughout the world.

“Our competitive advantage is our field to table processes, customized manufacturing, customer focus/ risk management, as well as R&D to assist our customers worldwide with customized formulations and trouble shooting.”

Speaking on the plans for operation in Korea, he said:

"SunOpta will continue to invest in developing further business in Korea and throughout Asia. This will be centered around high quality identity preserved soybeans, specialty grain products and value-added ingredients. As SunOpta considers how best to move forward with new opportunities, it will consider FOODPOLIS as one of its key options.

However, as of yet, no decisions have been made as to where any expanded operations may be located."

As for his perceptions on growth potential for organic food products and their impact on lifestyles, he observed that the main challenges are supply and risk management of price for end users.

“Women and children are the primary consumer. The interest for organic food does cover all economic classes,” he said.

HEALTHY FOOD FIRM

Dongwon F&B Co. Ltd. is one of the largest food companies in Korea, involved in the production and distribution of processed meat products, spices, beverages, seafood products and agricultural products. It is already is a renowned producer of healthy foods and is the country's top food export company.



Dongwon F&B came into being as an independent specialized food company from the main food division of Dongwon Industries co., Ltd. in November of 2000.

The company and its subsidiaries operate in five businesses: general food business, which provides canned tuna and canned seafood, as well as hams and sausages, frozen products and others; logistics business, which distributes food materials, provides foodservices and operates restaurants; condiment business, which provides various flavor products and other condiment products; dairy business, which provides milk, and feed business, which provides formulated

feeds for poultry, pigs, cattle and others.

The company's slogan is "Spreading Healthy Food Culture" and it aspires to make the customers' meals healthier and tastier. In addition, via the relationship between Cold Chain System and Dongwon specialized food research center, Dongwon F&B is able to retain its highly ranked title because of the fresh and perfectly high quality food for its customers.

The company's product portfolio includes canned tuna and canned seafood, frozen foods, chilled foods, laver and dried seaweed, beverages, mineral water, soft drinks, pre mixes, ham and sausage and edible oil among others.

Dongwon F&B distributes its products through various channels including department stores, sales agencies and discount stores.

While the canned-tuna division remains as cash cow, the company is pushing ahead with business diversification. Dongwon F&B is strengthening the competitiveness of existing businesses and expanding business areas in order to become a global food company. It is also tapping into overseas markets rather aggressively and is pursuing to be the first and the best.

The aim to become a general health food company representing the healthy food culture of the new millennium.



Most of the Dongwon F&B products are healthy processed foods low in fat and calories. The main export products include canned tuna, seasoned seaweed, and kimchi. Dongwon canned tuna, in particular, is the bestseller of Dongwon F&B. Over 4.5 billion cans have been sold since the product was released in 1982.

Dongwon canned tuna has evolved in various ways. At first, it was made of only tuna fillet. Then, the company started producing tuna with several seasonings such as hot pepper sauce and vegetables. The third generation of the product came in square-shape cans and received the name “Dell-cube.” In

addition, Dongwon launched a high-end canned tuna product line: toro (the fatty meat of tuna), tuna with Bhut Jolokia (the hottest pepper in the world), omega-3 tuna, and DHA tuna.

The other popular products include Dongwon Yangban Seasoned Seaweed and Dongwon Yangban Kimchi.

In 2002, Dongwon Yangban seasoned seaweed was selected the top bestseller among Korean foods sold in Japan. Since then, the product has increased its share of the Japanese seasoned seaweed market to 23%.

Dongwon Yangban seasoned seaweed was able to captivate the

tastes of the Japanese because it is thin and crispy, unlike the thick and tough seaweed produced in Japan. The product is sold by large Japanese distributors - JUSCO, DAIEI, and ITO-YOKADO.

What's more, Dongwon F&B joined hands with Asahi (Japan's largest beer brand) and developed new products as beer snacks - Kimchi Seasoned Seaweed and Wasabi Seasoned Seaweed. The two products became big hits in the Japanese market, and later entered Russia and Southeast Asia.

The interest of the Japanese in Dongwon Yangban kimchi is also quite high. Yangban kimchi came to the

forefront after it ranked first in the blind kimchi test for buyers organized by COOP SAPORE (a large Japanese consumer cooperatives) in 2005. The reason Yangban kimchi is so successful in Japan is that it tastes just like the Japanese consumers like: less spicy and salty, while being sweeter than regular Korean kimchi. The product is demonstrating its potential by recording high sales in about 2,000 stores in Japan, including ITO-YOKADO and JUSCO.

Instant rice SsenCook and Yangban Porridge are two healthy food products that are being well received in overseas markets. The two main products of SsenCook line are instant germinated brown rice and instant mixed grain rice. Both are very nutritious and have such a soft taste that they melt in the mouth.

The SsenCook line is widely regarded as a new trend in the instant rice market, which until recently had been dominated by the white rice products. The instant

multigrain rice produced by Dongwon F&B can be used as a snack as well as a meal substitute.

Yangban porridge is a convenience food based on the traditional Korean dish juk (rice porridge). Over 7 million Yangban porridge products have been sold in Japan and the US since the first export in 2001. There are 18 kinds of Yangban porridge products: tuna, abalone, vegetable, pumpkin, and so on. Yangban porridge is receiving attention as a low-calorie and nutritious diet food from Japanese women interested in fitness and body shape.

Overseas Markets

To become a truly global food company, Dongwon F&B plans to increase its annual sales in Japan, China, and the United States to \$100 million by 2015.

Using its success in Japan as a springboard, Dongwon F&B is actively trying to cultivate the American and



Dongwon F&B Products



Dongwon F&B Products



Chinese markets. Since last March, Yangban seasoned seaweed has been sold in 2,000 stores of Kroger (one of the top three distributors in the US). The product is called “Yangban Sea Veggies” in the US. It is establishing a solid foothold as a healthy snack that Americans enjoy eating conveniently at anytime and anywhere.

Dongwon F&B’s organic green tea beverage “T2U” (Tea to You) is being sold in 173 stores of Whole Food Market (American supermarket specializing in organic food). Dongwon canned tuna is all the rage in China where the middle and higher classes are rapidly expanding. All the Dongwon canned tuna gift sets sold out in just 30 minutes when they were introduced as a special feature for the August Moon Festival at DongFang CJ Home Shopping (the largest home-shopping channel in China) last year. Marketing its products with the concept “Health from Sea,” Dongwon F&B plans to carry out promotions for canned tuna and seasoned seaweed in large Chinese supermarkets such as RT mart and Carrefour.

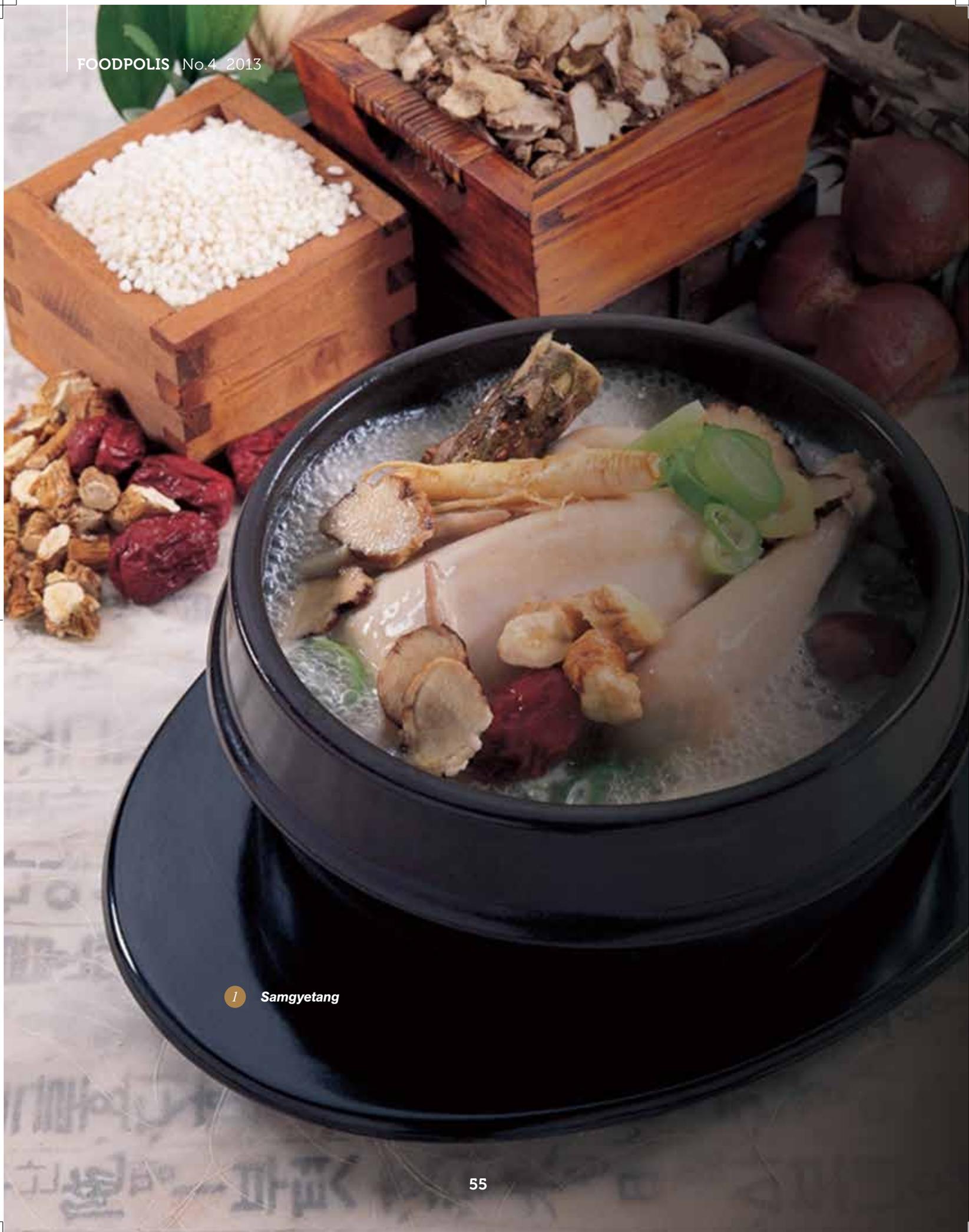
Dongwon F&B Products



In February this year, the company signed a partnership deal with China-based Bright Food Group to enter the Chinese canned tuna market. Under the deal, Dongwon F&B will supply canned tuna, and Bright Food Group will distribute and sell the products in China.

Bright Food Group is China’s largest food producer and distributor and has a distribution network of over 10,000 large-scale discount stores and convenience stores. By utilizing the vast network, Dongwon F&B aims to post annual sales of canned tuna worth 500 billion won (\$463.37 million) by 2018 in China. If the canned tuna business thrives, the Korean company plans to add more products after negotiation with the Chinese company.

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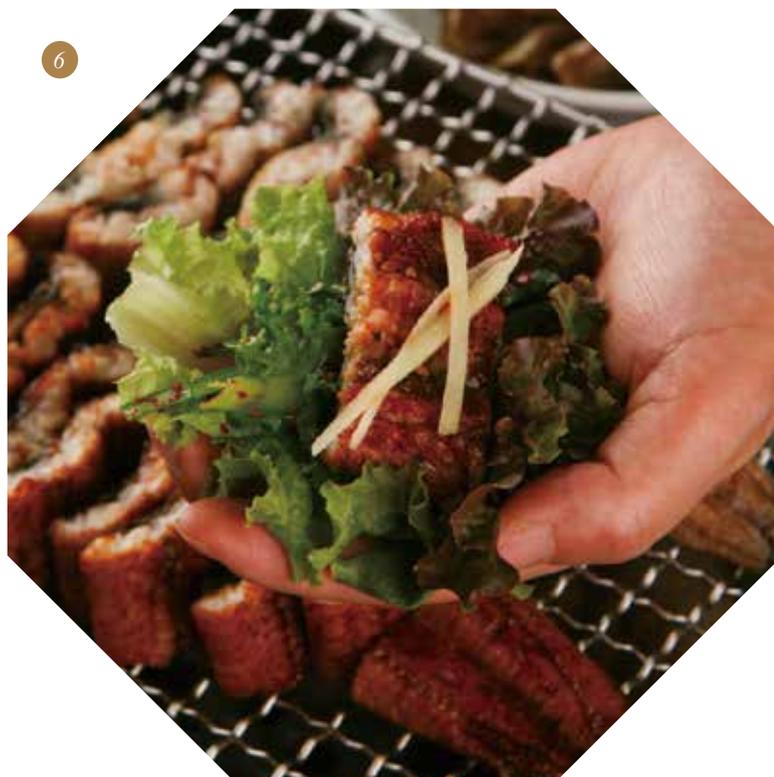


1 Samgyetang

DISHES TO BEAT THE HEAT

KOREAN TRADITIONAL FOOD

With the onset of summer in July, as temperatures rise, Koreans try to beat the heat by eating healthy traditional dishes that are very nutritious, and known for their restorative powers. We introduce you to some of the popular dishes that you will enjoy.



- 1 *Samgyetang*
- 2 *Jjimdak*
- 3 *Chogye Guksu*
- 4 *Naengmyeon*
- 5 *Kimchimari Guksu*
- 6 *Jangeo-gui*
- 7 *Naengmyeon*



There are two main schools of thought in Korea when it comes to summer foods. Many Koreans eat cold dishes to try to let off steam, but there are also many who eat hot and spicy food to combat fatigue. The top favorite in this category of ‘*Yi Yeol Chi Yeol*’ (fighting heat with heat) is a big steaming bowl of **Samgyetang** (chicken ginseng soup).

The dish is prepared by taking a young chicken, removing its innards, and stuffing it with garlic, rice, jujube, ginger, licorice root, and other herbs. The ingredients are then boiled together and served up in a delicious broth. Some restaurants even offer variations of the traditional **Samgyetang**, allowing you to add different ingredients according to your personal tastes.

Another favorite summertime chicken dish **Jjimdak**, a mixture of chicken, hot peppers, mushrooms, carrots, and other vegetables served in a savory, sweet-and-spicy, soy sauce-based broth. It is

characterized by its spiciness, so it is often paired with a side of **Dongchimi** (radish water kimchi), which helps neutralize some of the spice.

Jangeo-gui (broiled eel), is very popular and also has many health benefits. It is seasoned either with salt or a variety of spices such as hot pepper paste, sugar, soybean sauce, minced garlic, ginger, and sesame oil.

On the cold side, the most popular dishes are **Naengmyeon** (chilled noodles), **Naeng Kong Guksu** (noodles in chilled white bean soup), **Kimchimari Guksu** (Kimchi noodles) and **Chogye Guksu**.

Naengmyeon is a buckwheat noodle dish, usually garnished with sliced beef, boiled egg, cucumber, and pear and served chilled.

The broth of **Naengkongguksu** is made by soaking cooked soybeans in water and then grinding them up with a millstone. Noodles are placed in the broth and often topped with slices of

cucumber, boiled egg, and tomato. Full of protein, this savory dish is particularly invigorating on hot, humid days.

Kimchi Noodles are made from an icy mixture of Kimchi broth and meat broth. Simply replace the noodles with rice and you get Kimchi Bap, another summer delicacy sure to help you keep your cool.

In addition to **Samgyetang** there is yet another chicken dish that takes center stage as the temperatures climb. **Chogye guksu** noodles are served in a chilled chicken broth flavored with vinegar and mustard and topped with shredded chicken.

Another summertime favorite of the older generation is **Bosintang** a rich and spicy dog meat soup. But with increasing westernization and awareness about animal cruelty, today it is very rare to come across a young Korean who relishes this dish.

FOODPOLIS where
Innovation meets taste



FOODPOLIS, Food Hub of the Northeast Asian Market

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