Agricultural Policy Focus

No.176 (January 29, 2019)

10 Agricultural Policy Issues of Korea in 2019

Jeong Minkook et al.



. Agricultural Policy	Conditions in 2019	1



^{2. 10} Agricultural Policy Issues in 2019 ······ 3

Supervisor: Kim Hongsang, research director 061-820-2236 jhskim@krei.re.kr

Contents enquiries: Jeong Minkook, research director 061-820-2011 mkjeong@krei.re.kr

Subject	Author	Phone Number	E-mail
Agricultural policy conditions in 2019	Kim Yonglyoul, senior research fellow	061-820-2363	kimyl@krei.re.kr
Reorganizing the direct payment program to strengthen the public role	Park Joonkee, research director	061-820-2173	jkpark@krei.re.kr
Creating and increasing jobs in agriculture and rural areas	Ma Sangjin, senior research fellow	061-820-2258	msj@krei.re.kr
Creating smart farm innovation valleys and implementing a smart agricultural industry for innovative growth	Lee Myoungki, senior research fellow	061-820-2166	mklee@krei.re.kr
Increasing use of renewable energy through energy-independent villages in rural areas	Park Jiyun, research fellow	061-820-2136	jiyunpark@krei.re.kr
Building regional circular food systems to promote the Food Plan	Jeong Eunmi, senior research fellow Hwang Yunjae, senior research fellow	061-820-2311 061-820-2247	jeongem@krei.re.kr yjhwang@krei.re.kr
Enhancing safety in production of agricultural and livestock products	Park Miseong, research fellow Woo Byungjoon, senior research fellow	061-820-2362 061-820-2378	mspark@krei.re.kr bjwoo@krei.re.kr
Improving the quality of rural life by expanding SOC for residents	Seong Jooin, senior research fellow	061-820-2199	jiseong@krei.re.kr
Building new agricultural policy governance with the establishment of the Special Committee for Agriculture, Fisheries and Rural Areas	Gouk Seungyong, senior research fellow	061-820-2275	gouksy@krei.re.kr
Preparing for resuming agricultural cooperation between South and North Korea with the progress of denuclearization talks	Kim Younghoon, research director	061-820-2367	kyhoon@krei.re.kr
Responding to changes in the global trade environment	Moon Hanpil, senior research fellow	061-820-2259	hanpil@krei.re.kr

Material enquiries: Seong Jinseok 061-820-2212 jssaint@krei.re.kr

- "KREI Agricultural Policy Focus" analyzes the trend of and policy for agriculture and rural areas.
- This is also provided at the KREI website (www.krei.re.kr).

KREI Agricultural Policy Focus No. 176 10 Agricultural Policy Issues of Korea in 2019

Registration No. | 6-0007 (May 25, 1979)

Published | January 2019 Publisher | Kim Changgil

Publishing institution | KREI

601, Bitgaram-ro, Naju-si, Jeollanam-do,

58217, Korea +1833-5500

Printed by | Handesigncorporation ISBN | 979-11-6149-270-4 95520

- The contents in this book do not necessarily represent the official opinion of KREI.
- The contents in this book can be cited, provided that the source is clearly stated. Unauthorized reproduction or copying is illegal.

Summary

O The Korea Rural Economic Institute selected 10 agricultural policy issues of Korea in 2019 as follows, considering the basic frame that agricultural policy should pursue and the issues that need to be solved urgently and reflecting opinions of farmers, experts in agriculture and rural areas, and journalists.

10 Agricultural Policy Issues	Description		
	Reorganize the direct payment program to strengthen the public role		
	of agriculture and rural areas, and not to be connected to production.		
① Reorganizing the direct payment	• A program is required for stabilized management of rice farmers if the		
program to strengthen the public role	variable direct payment program for rice is switched to a fixed direct		
	payment program.		
② Creating and increasing jobs in	Jobs in agriculture are expected to continue to increase.		
	Build job ecosystem platforms in central-provincial-county units, and		
agriculture and rural areas	implement policies for creating participation-type jobs.		
③ Creating smart farm innovation valleys	Create successful smart farm innovation valleys as innovative growth		
and implementing a smart agricultural	engines in the agricultural industry.		
industry for innovative growth	Implement smart operation across the agri-food industry.		
① Increasing use of renewable energy	Promote energy-independent villages by organizing rural-type energy		
through energy-independent villages	cooperatives operated by residents to achieve the goal of 'Renewable		
in rural areas	Energy 3020' of the central government.		
⑤ Building regional circular food	Establish national food strategies for comprehensively planning the		
systems to promote the Food Plan	entire process of food production, processing, distribution and		
	consumption, and build regional circular food systems.		
	Develop a strategy for early settlement of PLS and minimized damage		
Enhancing safety in production of	to farmers.		
agricultural and livestock products	Improve regulations for supplying safe livestock products, and		
	consider the effect of strengthening regulations.		
	• Although policies for improving farmers' quality of life are enforced,		
① Improving the quality of rural life by	the effect of improving living services in rural areas is limited.		
expanding SOC for residents	Strengthen policies for improving the quality of life in connection with		
	expansion of SOC for residents in rural areas.		
Building new agricultural policy	• Ensure the representativeness of the committee and organize a capable		
governance with the establishment of	executive office.		
the Special Committee for Agriculture,	Select agendas for creating outcomes through intensive discussion		
Fisheries and Rural Areas	and establish strategies.		
Preparing for resuming agricultural	Plan and implement programs for step-by-step inter-Korean		
cooperation between South and North	agricultural cooperation to prepare for the progress of		
Korea with the progress of	denuclearization talks among South and North Korea and the US, and		
denuclearization talks	the age of peace.		
® Responding to changes in the global	The US will continue to lead changes in global trade order.		
trade environment	Proactively respond to global trade environment changes centered		
	around multilateral cooperation, e.g., CPTPP and RCEP.		

Agricultural Policy Conditions in 2019¹⁾

- ☐ The outlook for economic growth rates in Korea and other countries in 2019²)
 - The global economic growth rate in 2019 is forecasted to slow down in comparison with the previous year because of downside risks.
 - Forecasts of the global economic growth rate (%): $3.0 (2018) \rightarrow 2.9 (2019) \rightarrow 2.8 (2020)$
 - (Advanced countries) In 2019, the economic growth rate of advanced countries including the US, Europe and Japan is expected to be 2.0%. Although that of the US is expected to continue to grow thanks to favorable employment tendencies and consumer sentiment, it has a potential risk because of prolonged trade disputes between the US and China. Europe has political uncertainty, e.g., a no-deal Brexit, and downside risks, for example, the spread of trade protectionism.
 - (Emerging countries) In 2019, the economic growth rate of emerging countries is expected to be 4.2%. However, it is possible that the rising loans limit capital inflow; increasing debts make it difficult to respond to financial market changes; rising trade tensions slow down global growth; and the global value chain is weakened. While it is very probable that the effect of trade disputes between the US and China has an impact on China's real economy, it is expected that regulations enforced to stimulate domestic demand can cancel out the downside risks.
 - In 2019, Korea's economic growth rate is expected to be 2.6%.
 - The outlook for Korea's economic growth rate (%): $2.7 (2018) \rightarrow 2.6 (2019) \rightarrow 2.6 (2020)$
 - In 2019, steady growth will continue mainly in the consumption and export sector while the financial policy is expanding.
 - High uncertainty in the future market is predicted.
- ☐ The outlook for Korea's agricultural sector in 2019³⁾
 - In 2019, the agricultural production value is forecasted to decline slightly.
 - The agricultural production value in 2019 is expected to be 49 trillion 442 billion won, down 1.5% from the previous year because of reduced production in the grain and livestock industries, and the added value is expected to be 27 trillion 262 billion won, down 2.3% from the previous year.

¹⁾ Kim Yonglyoul, senior research fellow

²⁾ Based on Global Economic Prospects (World Bank) and the Economic Outlook Report (Bank of Korea).

³⁾ Based on Agricultural Outlook 2019 (KREI).

- The farm household income in 2019 is forecasted to be more than 40 million won for the first time.
 - The farm household income in 2019 is forecasted to be 40.06 million won, up 1.1% from the previous year thanks to an increase in off-farm income. The proportion of agricultural income in the farm household income is forecasted at 26.3%, a 0.8%p decrease from the previous year.
- In 2019, 1.36 million people are forecasted to be employed in agriculture, forestry and fisheries, a 1.5% increase from the previous year.
 - The following trends are forecasted to continue: the growing interest in agriculture and rural areas, and the increase in baby boomers' and young people's returning to farming and rural areas.

10 Agricultural Policy Issues in 2019

2.1. Reorganizing the Direct Payment Program to Strengthen the Public Role⁴⁾

- □ A need for reorganizing the direct payment program to respond to agricultural policy condition changes is raised.
 - The public role of agriculture is switched from food production to the quality and safety of agricultural products, and conservation of the natural environment.
 - At the time of introducing the direct payment program, the following public roles were emphasized: the need for compensating income loss following the reduced market distortion policy including the abolished Government's Rice Purchase Program, and ensuring a food production basis prepared for rice market opening.
 - While approximately 20 years have elapsed since enforcement of the direct payment program, rice oversupply has occurred. Because of people's higher income, consumers want the new public roles of agriculture and rural areas as follows: the safety and high quality of agricultural products, and conservation of nature, the environment, and beautiful landscape.
 - It is needed to reform the direct payment program for sustainable agriculture and rural areas in cooperation with consumers and farm households.
 - Consumers have doubts as to the public role of agriculture, for example, environmental load issues in agriculture, livestock diseases, stench issues, and damage to rural landscape.
 - The current direct payment program cannot implement all public roles of agriculture required by consumers.
 - More than 80% of the direct payment program budget is used for rice farmers, to result in imbalances among items, and limited implementation of the public role.
 - While the variable direct payment program for rice contributes to stabilizing rice farm management, it also creates rice overproduction issues.
- □ Direction for reforming the direct payment program for improving the public role of agriculture and rural areas
 - Major countries have conducted agricultural policy innovation to strengthen the public role of agriculture and rural areas.

⁴⁾ Park Joonkee, research director

- The EU introduced cross compliance to strengthen the public role of agriculture and rural areas in Agenda 2000. The EU also strengthened the role of conservation of the environment and resources with the compulsory green payment budget of 30% in the direct payment program budget for each member country in 2010 Agricultural Policy Innovation.
- Japan abolished the direct payment program for rice which is an income support program connected to rice production step by step by 2018, and added direct payment for farmland preservation to the existing direct payment program for the public role (direct payment for mid-mountain areas, direct payment for farmland and water conservation, agricultural direct payment for environmental conservation) in order to provide an institutional basis for strengthening the public role of agriculture and rural areas.
- Basic direction for improving the direct payment program to strengthen the public role
 - First, it is necessary to ensure grounds for support and rationality to make it clear that the direct payment support is not just income subsidies, but a compensation for the effort for the public role of agriculture and rural areas.
 - Second, the program should be switched to income compensation for farm households' role for sustainable agriculture and rural areas.
 - Third, it is necessary to establish cross compliance conditions that farm households can follow and that can be monitored.
 - Fourth, it is necessary to ensure balance among items and solve structural oversupply problems of rice.
 - Fifth, it is necessary to reflect issues required for sustainable agriculture and rural areas (maintaining rural areas, securing agricultural successors, improving equity among farm households) when the direct payment program is reorganized.

☐ Tasks for reforming the direct payment program in the agricultural sector

- Review introduction of the direct payment program for improving the public role of agriculture.
 - The direct payment program for the public role can be designed as a basic direct payment scheme and an additional direct payment scheme. The basic direct payment scheme is a direct payment program to keep the agricultural base for stable food supply and manage agricultural resources appropriately, and specifies cross compliance conditions for minimum obligations required to this end.

- The additional direct payment scheme is a direct payment program specifying performance conditions for leading activities in future agriculture, for example, conserving the environment, managing resources and ensuring bio-diversity, to further support the basic direct payment scheme depending on performance levels.
- Switching to the direct payment program for the public role is to switch the role of agriculture from food production to environment and resource management. To this end, it is necessary to switch the direction of agricultural policy to enhancing the public role, establish cross compliance conditions that can be performed and monitored, and reestablish the roles of the central government and local governments.
- Review the fixed direct payment program to strengthen production decoupling and enhance the public role among the alternatives to the variable direct payment program for rice (fixed direct payment, production control, direct payment to respond to price fluctuations).
 - First, it is necessary to switch the policy direction from stable rice income to stable grain demand and supply in addition to solving the oversupplied rice problem (production control and compensation for dry-field farming).
 - Second, it is needed to expand stable management support systems, for example, income protection insurance to address farm households' concerns when rice prices drop.
 - Third, it is necessary to secure budgets sufficient to minimize the existing farm household beneficiaries' damage after abolishing the variable direct payment program.
- ☐ Expand the budgets for the direct payment program and ensure reasonable budget operation.
 - OIt is needed to ensure the direct payment program budgets sufficient to strengthen the public role and minimize farm households' damage after reorganizing the existing direct payment program. Furthermore, it is necessary to establish a resonable budget operation plan accepted by the people, for example, transparent delivery methods, a clear definition of the public role of agriculture, and equity among items.

2.2. Creating and Increasing Jobs in Agriculture and Rural Areas⁵⁾

- □ Recently the agricultural, forestry and fisheries sectors have employed more and more people.
 - After the third quarter in 2017, the agricultural, forestry and fisheries sectors showed an increase in the number of employees.
 - After the mid-1970s, the agricultural, forestry and fisheries sectors continued to employ less and less people. The number of employees was 5.514 million people in 1976 and 1.279 million people in 2017, showing a decrease of 3.6% on the annual average.
 - After the third quarter in 2017, the number of employees in the agricultural, forestry and fisheries sectors started to increase. In 2018, the agricultural, forestry and fisheries sectors employed 1.34 million people, showing an increase of 62 thousand employees year-on-year.
 - Recently, the agricultural, forestry and fisheries sectors have shown an increase mainly in employees in their 30s and younger, and in their 60s and over, regular employees, self-employed farmers, and unpaid family workers (an increase of 60 thousand employees in 2018 from 2017).
 - The number of employees in the agricultural, forestry and fisheries sectors will continue to increase for a significant period because of social, economic, cultural factors and policies.
 - Less and less employment in urban areas or non-agricultural sectors has affected the increase in the recent number of employees in the agricultural, forestry and fisheries sectors.
 - The following trends continue: baby boomers' (born between 1955 and 1963) returning to farming and rural areas for enjoying country life, and people valuing work-life balance in the society.
 - More and more people like and enjoy the lifestyle of "half-farmer, half-X."
 - The policies related to jobs in agriculture affect the increase in the number of employees, including the policy for supporting agricultural corporations, the policy for promoting employment, and the policy for giving support to young beginning farmers.
 - * The number of employees in agricultural corporations shows an increase thanks to the policy for supporting agricultural corporations and the policy for encouraging agricultural corporations to employ more people.
 - * In 2018, the competition rate for the Young Beginning Farmer Support Program (giving up to 1 million won per month to people younger than 40 years old for at most 3 years as a basic living cost) was 3.23 to 1, suggesting its great popularity.

⁵⁾ Ma Sangjin, senior research fellow

- ☐ The job creation effect of the agricultural sector is greater than that of other industries.
 - The job creation effect of the agricultural sector is greater than that of other industries. Greater potential for creating jobs is expected as the demand for food will increase.
 - In particular, the potential for creating jobs in agriculture and rural areas is very high along with creation of new agri-food demands, growth of rural convergence industries, expansion of Food Plans, improvement of the job environment, and vitalization of the social economy.
 - Japan has steadily carried out the measures for creating jobs in line with the policy for vitalizing communities as well as the policy for employment support in the agricultural sector, and measures for sending Community Reactivating Cooperator Squads. Japan is enforcing diversified policies in cooperation with governmental departments, local governments, enterprises and NPOs (non profit organizations).
- □ It is needed to establish a system for implementing agricultural and rural job policies including downstream and upstream industries.
 - Jobs in agriculture and rural areas have direct impact on the local economy.
 - Because the scale of profits drained outside is not great, the jobs have a great effect on activating local economies, relative to business scales.
 - The agriculture and rural sector has a great effect on creating jobs whether their scale is small or not.
 - * The Wanju Local Food has an effect of 60 billion won about local agricultural product consumption, and employs 350 people.
 - * Naturaldream Park in Gurye has an effect of 10 billion won about local agricultural product consumption, and employs 520 people.
 - It is needed to implement projects for employing young people to vitalize rural areas.
 - It is necessary to promote job projects for young people to vitalize rural areas and improve residents' quality of life. It is necessary to establish programs in which young people can participate in leading rural vitalization, for example, the provision of social services currently not enough in rural areas like transport, health and welfare, education, response to disasters for safety; smooth returning to rural areas and farming; rural tourism, local food, environment and landscape maintenance; the construction of a rural heritage resource database.

- Encourage agricultural corporations to employ more people.
 - Select good agricultural corporations to facilitate exchange with agricultural students and trainees for returning to rural areas and farming so that they can have enough information on each other and be prepared. Then it is necessary to increase employment through human resource matching between trainees and agricultural corporations.
 - Provide more support to establish local Food Plans, develop rural convergence industries, and provide support to young beginning farmers for their smooth settlement to facilitate employment by agricultural corporations.
- Build a support system between the central government and local governments to create a job ecosystem in agriculture and rural areas.
 - It is necessary to build a job ecosystem platform system based on central-provincial-county units. The central government will be a control tower, and the provincial local governments will focus on integrating job support organizations and revitalizing governance, and county-level local governments will focus on employment and operation of local human resources.
 - The central government will focus on coordinating related policies and strengthening networking, for example, building a statistics basis related to the jobs in the agricultural industry and rural areas including downstream and upstream projects as well as agriculture.
 - The local governments integrate and connect support organizations related to agricultural and rural jobs (urban-rural exchange, rural tourism, rural convergence industries, community building, life-long learning, the social economy, returning to farming and rural areas), revitalize governance among major actors, and operate a dedicated support system.

2.3. Creating Smart Farm Innovation Valleys and Implementing a Smart Agricultural Industry for Innovative Growth⁶⁾

- ☐ It is necessary to enhance innovation capability for the continued growth of the agricultural industry.
 - Poor innovation capability in the agricultural sector contributes to its sluggish growth.
 - Agricultural income improvement has slowed down to result in reduced private investment because of relatively low (labor) productivity in the agricultural sector, more competition with cheaper imported agricultural products following free trade agreements with other countries, and rising input costs.
 - As a result, new farmers equipped with innovation capability are insufficient, which causes a
 vicious circle of limited productivity improvement.
 - The key to continued agricultural and agricultural industry growth is to enhance innovation capability of beginning farmers and the agricultural industry with convergence and innovation capability of 4th industrial revolution technology, for example, ICT.
- ☐ Create smart farm innovation valleys as a base for the agriculture innovation system.
 - The government has a plan 'for creating smart farm innovation valleys' to spread 'smart farms' as one of 8 key tasks for innovative growth.
 - It is necessary to facilitate farm and business start-ups centered around the smart farm innovation valleys, and create an industry ecosystem to allow agriculture and enterprises in the agricultural industry to grow together.
 - In 2018, Sangju, Gyeongbuk, and Gimje, Jeonbuk, were selected as the first areas for creating smart farm innovation valleys. Their foundation will be constructed in the first half of 2019, and second candidate areas will be selected (2 areas in early 2019).
 - The plan is to train 500 young experts by 2022 through the Smart Farm Training Course composed of "introduction educational training management exercise."
 - Young trainees for smart farms (100 trainees in 2019) will be selected and receive special training.

www.krei.re.kr 9

⁶⁾ Lee Myoungki, senior research fellow

- From 2019 to 2021, smart farms (24ha in total, 6ha per farm) will be created for young people without the farming base to rent for 3 years. Through assessment, the farms will be rented up to 5 years.
- Smart farm complexes will be created to facilitate development of new products and technology by downstream/upstream enterprises (equipment, food and bio companies) in cooperation with farmers and research centers.
 - Smart farm complexes will be built in 18ha (about 4.5ha per farm) by 2021.
 - The innovation valley support centers will be start-up centers, manage and analyze data, enable experiences, and support enterprises in the smart farms.
- Important tasks to make the smart farm innovation valleys successful as a base for switching the agriculture innovation system
 - Operate innovative training programs for young founders and farm start-ups.
 - Give diversified support for stable settlement in farming as well as rented smart farms.
 - Expand agricultural industry R&D funds invested in the innovation valleys.
 - Conduct efficient collection, analysis and use of big data in the innovation valleys.
 - Enhance policies for facilitating export of materials and ICT convergence systems.
 - Strengthen the network for propagating outcomes by expanding R&D through trainees' and farm households' participation and empirical programs.
 - Further apply the R&D and empirical outcomes to the agricultural industry.
- ☐ Make the agri-food industry smart for innovative growth of the agricultural sector.
 - Build an open platform to share big data including growth and cultivation information of smart farms.
 - It is necessary to develop a collection standard for ensuring good big data, and expand big data collection based on farm household units.
 - Expand smart agriculture centered around protected cultivation to livestock and dry-field farming.
 - Smart livestock facilities for automated temperature and humidity control and feed supply will be expanded. Three pilot complexes for smart livestock production will be created.
 - Propagate dry-field farming models by automating farm works on the basis of data.

- It is necessary to expand automation from the existing automatic water supply models to insect pest control through drones and image analyzers.
- Make the overall agri-food value chain smart including distribution and export.
 - Use big data and drones to forecast vegetable demand and supply including Chinese cabbages, and use block chains to facilitate the pilot projects for livestock product history management.
- Build a system for integrating and using farming information and e-maps (farm maps) including farmland and item information.
- Develop commercial tractor technology for driverless driving (Level 2) and unmanned work (Level 3).
 - Develop and commercialize key components, and try to export small and medium-sized driverless farm machines.

2.4. Increasing Use of Renewable Energy through Energy-independent Villages in Rural Areas⁷⁾

- □ The government announced 'Renewable Energy 3020' to supply 20% of total required energy with renewable energy by 2030.
 - The government announced the following targets: raising the portion of renewable energy accounting for 7% of total energy as of 2016 to 20% by 2030, and expanding installed capacity to 63.8GW. In particular, clean energy, for example, solar power and wind power will be supplied more, different from the current renewable energy by waste and bio materials. And solar power will account for 63% of renewable energy by 2030.
 - According to the plan, solar power panel installation will be vitalized in reclaimed land of salt-affected soil (in agricultural promotion areas), and farmland other than the agricultural promotion areas to generate 10GW by 2030.
- ☐ Expansion of solar power projects in rural areas and related issues
 - The government supports the rural solar-power projects to expand solar power generation in rural areas, and increase farm household income by producing and selling renewable energy.
 - The government provides incentives including giving more points to the REC (Renewable Energy Certificate) for renewable energy projects in which farmers participate as shareholders.⁸⁾ In bidding, more points are given to resident participants, and preferential support includes repayment in 10 years with a five-year grace period, an interest rate (floating rate) of 1.75%, and 10 billion won as a facility fund.
 - Through this support, the government aims to foster the rural solar power project as an exemplary case of resident-participating models, and supply solar power to 10,000 households by 2020 in rural areas. The budget for policy loans for rural solar power will increase from 32 billion won in 2018 to 150 billion won in 2019.
 - The government's full support contributes to fast supply and propagation of solar power panels in rural areas, and high interest therein. However, there are some issues along with fast solar power generation propagation in rural areas.

⁷⁾ Park Jiyun, research fellow

⁸⁾ The REC is a certificate proving renewable energy generation including solar power and wind power. The government specifies REC weights in consideration of the impact on the environment, technology development and industry revitalization, generation cost, and natural resources to facilitate balanced use and supply of renewable energy, and develop technology.

- Various social conflicts occur as follows. Because solar power generation systems are first installed in marginal farmland, the solar power panels installed in steep farmland can cause landslides. The solar power panels recklessly installed damage the landscape, and pollute the environment and soil. Nearby residents are concerned about their safety.
- ☐ Build energy-independent villages by establishing energy cooperatives for rural areas led by residents.
 - It is necessary to produce environment-friendly renewable energy and develop energy-independent models led by residents in rural areas.
 - There is a need for a new type of energy-independent villages for rural areas which residents actively participate in and lead in order to increase residents' acceptance and effectiveness of projects, and supply more renewable energy to rural areas.
 - The previous energy-independent village projects, for example, low-carbon green villages or environment-friendly energy towns were top-down projects led by the government, and selected energy sources focusing on waste and biogas. Because waste or biogas emit stench, residents do not accept the projects. Moreover, because the projects were conducted in a short period as policy projects, it was hard to ensure enough participation and agreement of residents. The projects mostly used a hardware approach focusing on facilities.
 - Build energy-independent villages for rural areas through the energy cooperatives.
 - The energy cooperatives are steadily discussed as one of schemes to encourage residents to accept renewable energy projects, and share the profits with local residents. The energy cooperatives already established and operated continue to increase.
 - \times The number of energy cooperatives: 33 (2013) \rightarrow 110 (2016)
 - Solar power generation plants constructed by energy cooperatives: 24 plants, 1,447kW (2013) → 60 plants, 3,668kW (2016)
 - In the energy cooperatives, their members share the energy sources together to produce energy, and earnings by selling the energy are given to the cooperative members. Because most energy cooperatives are established in areas where energy generation facilities are built, it is possible to expand renewable energy and increase local economy values through the cooperatives.
 - It is necessary to identify rural residents' demand and interest regarding energy to establish energy cooperatives in rural areas, and review construction of energy-independent villages through the cooperatives.

KREL L Agricultural Policy Focus No 176

- □ Establish and propagate successful models for resident participation, and mainly use sub-prime farmland.
 - Establish and propagate successful models for resident participation to share profits with farmers.
 - It is necessary to develop and provide a solar power model for resident participation to share profits with farmers in corporation with the Korea Rural Community Corporation (for projects on water) and Nonghyup (for projects on land).
 - Mainly use sub-prime farmland, for example, idle farmland, and reclaimed land of salt-affected soil.
 - It is necessary to extend a temporary use period ($8 \rightarrow 20$ years) for the farmland outside the agricultural promotion areas, and supply farming-type solar power.

2.5. Building Regional Circular Food Systems to Promote the Food Plan⁹⁾

□ Food plans are on the rise as a strategy for creating a sustainable agri-food industry base.

- Today, healthy eating is impossible only with each individual's effort. Therefore, the Food Plan
 is designed for safe food production and consumption by the government, local governments
 and local people.
 - The Food Plan is a strategy to enhance connectivity in the entire process from production to consumption from the perspective of safe and stable food supply as the people's agriculture, not just farmers' agriculture.

☐ Strengthening the link between the national comprehensive guidelines for food and local areas

- The national Food Plan aims to strengthen connection between the national guidelines and local areas through cooperation between governmental ministries.
 - The important role of the national Food Plan is to establish national guidelines for food security, food safety and the people's nutrition, and implement the public nature of food and connectivity thereof in each region.
 - It is necessary to cooperate with other ministries and collect various stakeholders' opinions to establish consistent policies related to food in governmental ministries and to establish the direction of policies.
- The local Food Plan is a unit for implementing enhanced connection of food projects.
 - The local government conducts integrated (policy, budget, support, organization, etc.) operation of projects connecting income creation of small and medium-sized farmers and old farmers and safe and healthy food supply through the public implementation organizations (integrated support centers for local food).
 - The public implementation organizations should work for the public to allow local stakeholders to participate in the decision-making process with their rights of self-determination and to implement local autonomy.
- □ Direction and strategy for enhancing the public nature and implementation of the local Food Plan
 - Enhance locality and relation, and connect with small-quantity multi-item production.

www.krei.re.kr 15

⁹⁾ Jeong Eunmi, senior research fellow, and Hwang Yunjae, senior research fellow

- Local Food Plans should enhance locality and relation as well as economic efficiency of food projects. The Plans aim to realize the public nature of food, reduce social costs and value trust by enhancing connectivity in the whole food process.
- With organized small-quantity, multiple-item production of local food and a system that enables year-round supply, it is possible to respond actively to estimated consumption, for example, school catering services and public catering services. Various products matching local features are found in the process to be resources vitalizing the local economy.
- Implement major projects through the city and county-integrated management system.
 - Local Food Plans are execution plans of county-level local governments. The administration should cooperate with the private sector in switching food-related projects to city and county-integrated management projects to enhance local food connectivity. And diverse stakeholders should agree with and carry out the process gradually to share the outcome.
 - The major projects of local Food Plans include ① organizing small-quantity multiple items production; ② managing safety; ③ enhancing accessibility by each resident group; ④ expanding relational consumption markets in and outside a concerned region; and ⑤ fostering social economy organizations for regional circular economy. Those projects are carried out by the public implementation organizations.

☐ Tasks for carrying out Food Plans

- Implement an integrated system.
 - From the stage of planning, it is necessary to implement an integrated system considering connectivity of production, processing, distribution and consumption. One team of each county-level local government should enhance comprehensive connection of related projects by the central governmental departments, and inter-connectivity between administrative organizations and public implementation organizations should be enhanced.
 - It is necessary to implement the Food Plan as a public project which residents understand and participate in through a software-type approach, for example, information exchange and training.
- Implement integrated Food Plans at the province level.
 - Although county-level local governments carry out local Food Plans, their project capacity is limited. Therefore, support by provincial local governments is required. It is necessary to

provide support for specialized training or programs of intermediary support organizations in province units to enhance the capability of the private sector. Also, each provincial local government should develop a strategy for changing systems or guidelines to supply more local food to support the local Food Plans of county-level local governments.

- Provide support for managing agri-food safety, or operate 'provincial food information centers' to help people understand the Food Plan. It is efficient that each provincial government provides essential data for enhancing local food connectivity.
- Establish a standing organization for comprehensively managing national food policies on a mid- and long-term basis.
 - It is necessary to establish a 'national food committee' for comprehensively managing food policies at the national level. It is necessary to establish an organization to comprehensively handle agri-food, nutrition, food assistance, the environment, eating habits, safe food supply, and establishment of food governance.
 - It is needed to establish a standing, not temporary, organization for mid- and long-term response in the future.

2.6. Enhancing Safety in Production of Agricultural and Livestock Products¹⁰⁾

2.6.1. Responding to the Enforcement of the PLS (Positive List System)

- ☐ Since 2019, the PLS has been enforced to strengthen the standards for allowable agricultural chemicals
 - Introduction of the PLS (Positive List System) was planned in October 2011, and it has been enforced since January 1, 2019 for all agricultural products to reduce misuse of agricultural chemicals and not to allow import of agricultural products not complying with the safety standards.
 - Major importers including Japan (2006), the EU (2008) and Taiwan (2008) have already enforced it, and the US, Australia and Canada apply stricter standards (no detection, 0ppm).
 - In 2018, 7,018 agricultural chemicals (including 4,441 provisionally registered) were further registered. There are 54,424 standards for safe use of agricultural chemicals for each crop. And 5,320 were added to the MRL (Maximum Residue Limits) to establish 12,735 MRLs for 498 types.
- □ Despite the additional measures, people do not fully understand the standards for safe use of agricultural chemicals, and are still concerned about the safety thereof.
 - Raised issues include 1) insufficient available agricultural chemicals; 2) no knowledge of ideal time of application to agricultural products cultivated and stored long; 3) unintentional pollution; and 4) farmers' low awareness of the PLS.
 - The farmer survey carried out in December 2018 shows the self-evaluation score about PLS preparation and response is 2.8 on a 5-point scale, suggesting inefficiency. Farmers still feel concerns about full enforcement of the PLS.
- □ Develop a method for early settlement of the PLS and minimized damage to farm households.
 - Enhance safety management mainly by providing guidance.
 - It is necessary to provide customized consulting services to vulnerable farmers including small-scale and old farmers about guidelines for using agricultural chemicals safely, and provide support to voluntary farm households for prior safety survey.

¹⁰⁾ Park Miseong, research fellow, and Woo Byungjoon, senior research fellow

- It is necessary to conduct training and public relations about how to use agricultural chemicals safely and reduce spray drift thereof through agricultural training programs.
- Build an agricultural chemical history management system, provide training to agricultural chemical sellers, and establish a post- and prior-management system to reduce spray drift of agricultural chemicals.

2.6.2. Enhancing Safety of Livestock Food

- ☐ Establish a comprehensive plan to improve food safety, tackling concerns about safe livestock products.
 - More disbelief after the scandal of eggs contaminated with insecticide
 - The scandal of eggs contaminated with insecticide on August 14, 2017 generated distrust of chicken and eggs. Despite total inspection, collection and disposal, egg consumption dropped by 46.0% 2 weeks after the scandal (as of August 30) and the farm gate price dropped by 32.2% (as of September 12) (KREI).
 - Establish comprehensive measures for improving food safety.
 - The government announced the 'Comprehensive Measures for Improving Food Safety' including 20 tasks in 4 categories in December 2017. The contents related to livestock product safety in the Comprehensive Measures include the switch to livestock farming based on animal welfare, more inspection of pesticides and stricter punishment for violations, compulsory marking of egg-production dates and compulsory distribution of eggs consumed at home by selected packing companies, and compulsory HACCP of egg farms for commercial sales.
- □ Although marking of egg-production dates is a rational regulation, egg farm households can be damaged if it is applied.
 - The egg-production date marking regulation will be enforced.
 - The egg-production date marking regulation will be enforced after the guidance period for 6 months from February 23, 2019, and eggs consumed at home should be distributed just by certified selected packing companies.

- o Possibility of egg-farm households' damage
 - If the production date marking regulation is first enforced without ensuring refrigerated distribution facilities for fresh egg distribution, it can be hard to sell eggs of older production dates whether the eggs are fresh or not. In this case, there is a possibility of farm households' damage without the effect of enhanced egg safety.
- □ While it is important to improve regulations for supplying safe livestock products, it is necessary to consider the effect of enforced regulations.
 - It is necessary to enhance the field applicability of stricter regulations.
 - It is necessary to have a preemptive response system to ensure safe livestock products, and improve the system by stricter regulations if required. However, it is required to review the field application potential while achieving the goal of enhancing food safety by enforcement of stricter regulations.
 - o Consider autonomous enforcement by the industry.
 - It would be more ideal that the industry adopts autonomous control, not by regulations if the contents of regulations are not for fundamental improvement of food safety, but assist consumers' right of information and address their concerns.

2.7. Improving the Quality of Rural Life by Expanding SOC for Residents¹¹⁾

- □ Although the government has enforced the policy for improving farmers' quality of life since 2004 for rural areas, it is necessary to increase the effect of policies because the target of the Rural Services Standard is not achieved.
 - The policy for improving farmers' quality of life is being implemented.
 - The government has enforced the policy for improving farmers' quality of life since 2004 to improve the condition of living in rural areas and improve residents' quality of life. As part of the effort, the Rural Services Standard suggesting policy targets about essential services for better living was established in 2011 and has been operated.
 - The Rural Services Standard program started with 31 items in 8 categories in 2011, and currently includes 17 items in 7 categories (health and welfare; education; settlement; economic activity and jobs; culture and leisure; environment and landscape; and safety).
 - It is necessary to make the program more effective.
 - There is no policy means for achieving the targets and many items are short of the targets despite the enforcement of the program. Thus, improvement is required to address the issue of ineffectiveness.
 - As of 2019 when the period of the Third Master Plan for Improving Quality of Life is terminated, only 5 among 17 items are expected to achieve the targets of the Rural Services Standard established 5 years ago.
- ☐ From 2019, the government plans to expand the SOC for residents.
 - SOC for residents will be expanded.
 - The government announced the plan for 'Investment in Regional SOC' in August 2018, to suggest the direction of budget investment with priority to projects highly related to the people's quality of life and of which the outcome can be visualized early.
 - The SOC for residents refers to "small-scale infrastructure for living in each region" related to leisure, health, safety and environment which people easily access in their life, and is compared to the investment in conventional infrastructure aiming at economic growth and support for industry, for example, roads and railways.

¹¹⁾ Seong Jooin, senior research fellow

- Investment in 10 tasks of 3 categories
 - The plan determined is to invest 8.6 trillion won in 2019 (5.8 trillion won in 2018) in 10 tasks of 3 categories including leisure and health, local jobs and revitalization, safe living and environment.
 - The budgets for the three categories are as follows: ① 1.6 trillion won for leisure and health (libraries, culture and physical activity facilities); ② 3.5 trillion won for regional revitalization (urban regeneration, improvement of living conditions in rural areas, smart farming, regeneration of old industrial complexes); and ③ 3.5 trillion won for safety and environment (improving welfare facilities, expanding infrastructure for safe living, tackling fine dust).
- Establish a joint SOC team by related governmental ministries.
 - The joint 'SOC team' by related governmental ministries is led by the Minister of the Office for Government Policy Coordination to comprehensively manage and operate the SOC projects. The 'Mid- and Long-term Plan for SOC' with expanded investment plans for the coming 3 years is being developed to be completed in March 2019.
 - Indexing the minimum standard based on access distances to each region and facility is also being carried out. The Ministry of Land, Infrastructure and Transport establishes the national minimum standards of essential infrastructure for living on the basis of the Urban Regeneration Act.
- □ Connection with the policy for improving the quality of life is required to expand the SOC in rural areas.
 - It is necessary to promote the SOC in consideration of the features of rural areas.
 - The SOC should reflect the features of rural areas, and expansion of the SOC for rural areas is required to be interconnected to the rural services standard in particular.
 - Considering the residences of rural residents are distributed, it is required to establish a standard specially for expanding the SOC for rural areas different from urban areas. This can be based on the rural services standard.
 - It is necessary to interconnect expansion of the SOC to the rural services standard so that the standard can be substantially effective for improving the conditions of living in rural areas.
 - Major tasks to enable the policy for expanding the SOC to contribute to improving rural residents' quality of life

- Establish a support principle preferential for local governments in unfavorable conditions short of the Rural Services Standard to guide spending SOC budgets for rural residents.
- It is necessary to install facilities ideal for rural areas, for example, small spas or cultural and educational facilities reflecting the features of residents' demand based on the standards different from urban residents.
- Furthermore, because installed facilities do not contribute to residents' using them in rural areas in that there are many vulnerable public transport users, it is thus necessary to promote the effort in parallel with the support programs for ensuring accessibility to the public transport system (e.g. a public transport model for rural areas).
- It is necessary to continue to promote different support policies for vulnerable villages in terms of living conditions along with the support plans for vulnerable areas.
- A process is required to collect public opinions for reflecting the suggestions described above in the 'Fourth Five-year Master Plan for Improving the Quality of Rural Life (2020 to 2024)' established in 2019.

2.8. Building New Agricultural Policy Governance with the Establishment of the Special Committee for Agriculture, Fisheries and Rural Areas¹²⁾

- □ Establish a dedicated team directly belonging to the president for the essential switch of the agricultural policy.
 - The Presidential Special Committee for Agriculture, Fisheries and Rural Areas was President Moon Jae-in's pledge for agriculture and fisheries.
 - He said he would make the following goal and direction for the agricultural policy by changing the national philosophy and basic conditions for agricultural policies: sustainable agriculture with the balance among agriculture, the environment and food.
 - He promised to establish an organization dedicated to agriculture and fisheries directly belonging to the president to allow farmers, fishermen and the people to participate in the committee to reflect their opinions for the fundamental switch of the agricultural policies.
 - The Act on the Special Committee for Agriculture, Fisheries and Rural Areas was passed on December 7, 2018 in the plenary session of the National Assembly through agreement between the opposing parties.
 - The Act will be enforced from April 25, 2019, 4 months after enacting the Act.
 - A special committee for giving advice to the president will be set up and operated to deliver opinions of experts and from the field about current issues in agriculture, fisheries, rural areas.
- □ Discussion on the direction of sustainable development in agriculture, fisheries, and rural areas and advice to the president
 - Tasks of the Special Committee for Agriculture, Fisheries and Rural Areas (Article 2-2) of the Act)
 - Matters for the mid- and long-term policy direction for sustainable development of agriculture, fisheries, rural areas, and realization of their public function
 - Matters about rural development and promotion of welfare
 - Matters about systematic conservation and efficient use of the ecosystem, environment and resources in the rural areas
 - Matters about establishing autonomous agricultural policies based on local autonomy and decentralization
 - Matters about stable supply of agri-food for the people
 - Matters about realizing multi-dimensional values of agriculture, fisheries, rural areas
 - Matters requested by the chairman or more than 1/4 of the committee members

¹²⁾ Gouk Seungyong, senior research fellow

- Matters about inspecting and assessing execution plans and progress of Nos. 1 to 7
- Matters requested by the president for advice
- Members of the Special Committee (Article 3 of the Act)
 - Minister of Strategy and Finance, minister of Agriculture, Food and Rural Affairs, minister of Oceans and Fisheries, minister of the Office for Government Policy Coordination, and minister of Food and Drug Safety
 - Twelve or fewer members from agriculture and fishing organization representatives including the farmer organizations according to Article 3-4 of the Framework Act on Agriculture, Rural Community and Food Industry, and the fisheries organizations according to Article 3-5 of the Framework Act on Fisheries and Fishing Villages Development
 - Twelve or fewer experts with special knowledge and much experience about agriculture, fisheries, and rural areas
- The chairman is appointed by the president. It is allowed to have sub-committees for each division and a special committee for specific current issues, and an executive office is set up.
 - The executive office should be established according to the Presidential Decree, and the committee shall be existent for 5 years from the date of enforcement.
- □ Establishment of the Special Committee for Agriculture, Fisheries and Rural Areas is a new start point for switching the agricultural policy framework.
 - Establishing the committee is a start point for fundamentally switching the agricultural policies.
 - At this time of the second year of the Moon administration, the committee will be an opportunity for switching the direction of agricultural policies.
 - This will be a start point for cooperative governance in the agricultural policies to address current issues in the agricultural policies and find alternative solutions with the participation of related departments, farmers' and fishermen's organizations and experts in the committee.
 - Importance of configuration of the committee and the executive office
 - The Act just specifies the framework of the special committee and the executive office. The committee should have representativeness and a capable executive office for the role of the president's advisory organization. This is an important challenge to result in fail or success of the committee for 5 years.
 - It is necessary to establish a discussion structure so that the committee is not biased in favor of specific categories but encompasses overall agricultural and rural issues for sustainable agriculture and rural areas.

- Committee members should be farmers, fishermen or experts from their organizations who can conduct activities aiming at sustainable development across agriculture, fisheries, rural areas, not their organization or specific groups.
- A step-by-step approach ideal for agendas is required.
 - Approaches ideal for the features of a concerned agenda are required, for example, the agenda solvable by the effort of the agricultural and rural sector, and the agenda requiring cooperation with other sectors, for example, food.
 - It is necessary to establish alternatives quickly through intensive discussion for the agendas solvable through the effort of the agricultural and rural sector. For the agendas requiring cooperation with other sectors, it is necessary to establish plans systematically step by step.
- □ Select agendas requiring intensive discussion and focus on creating visible outcomes.
 - The agendas in which the committee can create outcomes in a relatively short period include agricultural policy decentralization, local agricultural policy governance, and revitalization of the social economy in rural areas. In-depth discussion and outcome creation are required from the initial stage of operation.
 - Development alternatives for the local agricultural policy governance, for example, agricultural policy decentralization or chambers of agriculture can be established and are easy to implement through discussion with governmental ministries, representatives of farmers' and fishermen's organizations, and experts.
 - The committee can also create the following outcomes on a short-term basis: getting positive public response and implementing tasks related to the vitalization of the social economy in rural areas, for example, improving the quality of life in rural areas, and creating jobs in agriculture and rural areas.

2.9. Preparing for Resuming Agricultural Cooperation Between South and North Korea with the Progress of Denuclearization Talks¹³)

- □ It is necessary to prepare for potential exchange and cooperation between South and North Korea as denuclearization and peace talks progress.
 - South Korea-North Korea-US summit meetings and quickly changing situations in the Korean peninsula
 - South and North Korea and the US agreed to pursue common goals of denuclearization and peace settlement in the '4.27 Inter-Korean Agreement', '6.12 Agreement between North Korea and the US', and '9.19 Inter-Korean Agreement', and declared to take practical measures required to implement the agreements.
 - A great progress in denuclearization and peace settlement is expected while the talk is out of the deadlock as the second North Korea-US summit meeting will be held in February 2019.
 - Cooperation between South and North Korea is forecasted to resume with the progress of the relationship among South and North Korea and the US.
 - Where the talk among the 3 countries progresses, it is expected that South Korea, the US, and the UN will ease the sanctions on North Korea.
 - Economic cooperation with North Korea can resume along with easing the sanctions, and economic exchange and cooperation will be expanded if North Korea cooperates and changes.
 - The frozen relationship between South and North Korea can thaw, and economic and agricultural exchange and cooperation can resume between South and North Korea. The relationship was frozen by stopping Mount Kumgang tourism in 2008, 5 · 24 sanctions in 2010, and closing the Gaeseong Industrial Complex in 2016.
- □ Promote differentiated agricultural exchange and cooperation step by step between South and North Korea.
 - Prepare and promote differentiated agricultural exchange and cooperation programs according to the future situations.
 - The following can be important starting points for economic cooperation with North Korea:

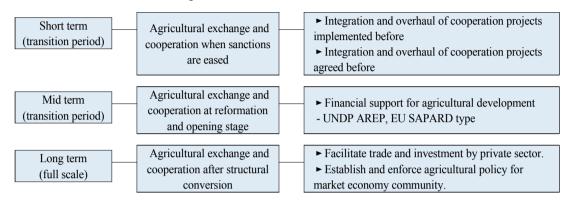
 ① sanctions on North Korea start to be eased and end; ② North Korea starts innovation and opening its market in full scale; ③ North Korea changes its economic system.

¹³⁾ Kim Younghoon, research director

- Step 1: the direction for preparing and promoting agricultural exchange and cooperation when the talks progress and sanctions are eased
 - When sanctions on North Korea are eased, agricultural cooperation with North Korea can be implemented. However, the centralized economic system of North Korea, management schemes and capability of economic and agricultural authorities, and the current situation in agriculture cannot change quickly. Therefore, it is expected that the environment for economic and agricultural cooperation with North Korea will be the same as the current level for a while.
 - At this time, it is necessary to reorganize and implement the agricultural exchange and cooperation projects implemented or agreed to implement before.
 - Plan cooperative development projects for pilot agricultural complexes in special zones or border areas, and promote trades and economic cooperation projects based on the projects.
 - Promote the KSP (Knowledge Sharing Program) through research centers and universities related to agriculture to provide support for agricultural science and technology development North Korea emphasizes and human resource development in agriculture.
- Step 2: the direction for preparing for agricultural exchange and cooperation at the stage of North Korea's full-scale reformation and opening
 - Expand and continue exchange and cooperation projects carried out in Step 1.
 - When the reformation and opening policy of North Korea results in facilitating the market economy and enhancing the capability of market economy operation, it is possible to carry out agricultural exchange and cooperation leading North Korea's economic system conversion and economic growth.
 - Build a financial and banking support program to establish a support scheme for carrying out agricultural development projects led by North Korea at the reformation and opening stage (see SAPARD of the EU and UNDP's AREP).
 - For enhancing the synergy of financial and banking support programs, cooperate with international development cooperation institutions (FAO, IFAD, UNDP) and international financial institutions (WB, ADB, AIIB).
- Step 3: the direction for agricultural exchange and cooperation after economic system conversion of North Korea
 - Allocate the effort of general economic exchange and cooperation in the agricultural sector to the private sector and the market.

- Establish and implement agricultural policies in line with building the market economy community in the Korean peninsula.

Figure 1. Step-by-step approach for agricultural exchange and cooperation between South and North Korea



- □ Divide roles for each actor and create the institutional environment of the government.
 - Divide roles for each cooperating actor.
 - Allocate the large-scale agricultural development and cooperation projects to the public sector, humanitarian support projects and development support projects to the private support organizations, trade and investment cooperation projects to the private companies.
 - The government should create the environment for facilitating and increasing the efficiency of agricultural exchange and cooperation with North Korea.
 - Carry out official discussion with North Korea, build programs for development and cooperation, build a cooperation system with international organizations, build a cooperation system between the private sector and the government in South Korea, and establish measures and systems for facilitating trade and economic cooperation with North Korea by the private sector.

2.10. Responding to Changes in the Global Trade Environment¹⁴⁾

- ☐ The US has strengthened protective trade policies since the Trump administration started.
 - The US puts stricter trade pressure on major trading partners.
 - The US continues to pursue its profits through trade pressure to protect its domestic industry and address its trade deficits.
 - ** Details of major trade pressures: Withdrawal from TPP, demand for WTO innovation, amendment of trade agreements signed before including NAFTA and the Korea-US FTA¹⁵), Articles 232 and 301 of the Trade Act in action, prolonged US-China trade disputes¹⁶)
 - While major countries including China, the EU and Japan accept some requests of the US, they reestablish trade policies with the US, and build a new multilateral trade structure for each region, for example, agreeing on CPTPP, promoting RCEP, and agreeing on Brexit.
 - The WTO also started to discuss the direction of reorganization led mainly by advanced countries (the EU, Canada, etc.) including enhanced transparency and notification obligation, improved dispute solution programs (related to appellate bodies), and modernized trade criteria.
- ☐ The direction of Korea's trade policy conditions according to changes in international trade order
 - Build a multilateral cooperation structure, and diversify the export market.
 - Korea has responded to current trade issues with the US and China through renegotiation of the FTAs, and plans to construct the multilateral cooperation structure, e.g., reviewing profits by joining the CPTPP while considering signing the RCEP this year.
 - The New Southern Policy and the New Northern Policy established by the Moon administration aim to build a cooperation platform for peace in northeastern Asia as an 'axis for peace', create a regional value chain by strengthening economic cooperation with ASEAN, India and Eurasia as an 'axis for prosperity' and make a frame for multilateral cooperation.

¹⁴⁾ Moon Hanpil, senior research fellow

¹⁵⁾ Reflected the request of the US and signed a new USMCA to replace NAFTA (Sep. 2018). The standard for the regional origins for protecting the US automative industry was further strengthened, and the constraints on raw dairy material import established for managing raw milk supply in Canada were discarded. Moreover, the US strengthened trade standards for digital trade, intellectual property rights and labor. Also, the following regulations were introduced as a trade standard for the first time: preventing government's unfair intervention in the foreign exchange market; and limiting FTAs with non-market economies including China.

¹⁶⁾ While the US forestalls China as a result of the US-China trade war last year, both leaders in the summit meeting on December 1, 2018 agreed to have a negotiation period for 90 days. China resumed importing agricultural products, energy, and industrial products of the US, and agreed to continue negotiations for key issues, e.g., forced technology transfer and infringement of intellectual property rights.

- ☐ Major trade issues in the agricultural sector in 2019
 - Potential expansion of free trade after joining CPTPP and signing RCEP
 - When Korea participates in mega FTAs, e.g., CPTPP and RCEP, it is necessary to pursue a concession strategy for the trade diversion effect rather than trade creation.
 - Proactive response to easing non-tariff measures in the agri-food sector, for example, animal and plant quarantine (SPS)
 - It is required to establish regulations and systems, and build human and material infrastructure to cope with stricter regulations, e.g., SPS related to agriculture, TBT (Technical Barrier of Trade), and intellectual property rights.
 - Participate in discussing the position of developing countries and agricultural subsidies for WTO innovation.
 - Although Korea was recognized as a developing country in the agricultural sector under the WTO structure, it is necessary to think of a new strategic selection about the position of developing country while considering that this is an issue about emerging economies, e.g., China, India and Brazil.
 - Negotiation on rice tariffs
 - The rice tariffication negotiation which continues with major countries since notification to the WTO in September 2014 still has key issues of reasonable tariff equivalents, mandatory import of rice, and quota allocation to each country.
- ☐ Active and proactive response to reorganized international trade order
 - It is forecasted that agricultural and livestock products produced in Korea will show a slower increase, and more products will be imported.
 - Although an increase slower than before is forecasted about the demand for agricultural and livestock products produced in Korea because of population decline, slower growth, changing consumption patterns, it is forecasted that the market share of imported agricultural and livestock products will increase because of smaller tariffs to comply with the FTAs signed before.
 - It is necessary to actively cope with changes in the trade environment at the time of transition.
 - Because the US is expected to continue leading changes in global trade order for a while,
 Korea as an industrial product exporter and agri-food importer has to establish a plan to cope with the uncertain trade environment more actively to minimize negative impact thereof.

- It is expected that stricter constraints unfavorable to importers will be applied, e.g., more transparent subsidies in Korea, limited trade remedies, and eased non-tariff measures in the agricultural sector on a mid- and long-term basis. Therefore, it is necessary to be prepared for the reorganized global trade order by improving acts, regulations and policy means in Korea.
- It is needed to develop a strategic plan for flexible negotiation.
 - It is necessary to continue to diversify agri-food trade in connection with the new northern and southern policies.
 - It is necessary to respond actively to discussion on WTO innovation a net agricultural importer, but closely review gains and losses about being a developing country in the agricultural sector to establish a flexible negotiation strategy.

< Reference > Process of Selecting 10 Agricultural Policy Issues in 2019

Step	Contents	Method	
1) Preparation	Select 50 agricultural policy issue candidates in 2019.	 Analyze 10 agricultural policy issues of KREI and 10 news selected by media for the latest 3 years (2016 to 2018). Analyze keywords related to agriculture and rural areas in 2018. (use social media and weekly agricultural, rural and food trends) Analyze the government report data in 2019. 	
2) Survey	Present 50 agricultural policy issue candidates to respondents, and ask them what the most important issues are in agriculture, rural and food sectors in 2019.	 Respondents: Members of the Forum for Agricultural and Rural Policy Innovation, KREI experts, farmers, members of the agricultural policy reform TF in the policy committee, journalists Period: NOV 29 to DEC 9, 2018 (first), DEC 21 to JAN 4, 2019 (second) Method: questionnaire survey through e-mail 	
3) Select candidates	Select 20 agricultural policy issue candidates by reflecting the result of the survey.	 Select 10 key issues for each respondent group. Expert advisory meetings (3 times) 	
4) Select final 10 issues	Select final 10 issues from 20 agricultural policy issue candidates through the expert advisory meetings.	 Ask KREI experts for manuscripts in each field. Complete the final draft after discussing additions. 	