

Historical Perspective of Korea's Agricultural Policy Research – A Case Study of KREI

Jeongbin Im
Professor, Seoul National University
email: jeongbin@snu.ac.kr

History of Agricultural Policy Study

In Korea, agricultural policy research has been conducted by public research institutes since the establishment of Agricultural Management Research Center (AMRC) under the Rural Development Administration (RDA) in 1967. This was the first research center for agricultural policy study in Korea. As the key institute of agricultural research and development in Korea, RDA had mainly been conducting development of agricultural technology and agriculture extension since its establishment in 1962. Therefore, the Korean government needed an additional institute that could conduct economic and sociologic research to make policies for promoting efficiency of farming and agricultural income because RDA has focused on agricultural technology research. In this context, AMRC was established in 1967 and started research for facilitating efficiency of agricultural management and reforming distribution structure of agricultural products. Affiliated with RDA, which had been conducting product-specific research to promote productivity based on natural science, most of the research of AMRC was also product-specific. At that time, AMRC mainly conducted research analyzing characteristics of farms, patterns of the trade, retail margin, and profitability of specific major cash crops (rice, beef, garlic, strawberries, silk, etc.). Other than those, AMRC conducted many researches to analyze economic feasibility of agricultural technologies developed by RDA and to search for feasible ways of agricultural extension of the technologies.

In 1973, in the course of economic development, the importance of agricultural income enhancement by commercial farming, enhancement of quality of life by rural development, and establishment of a development strategy for the agriculture sector became important. In that circumstance, to reinforce its function as the national agricultural policy study institute, AMRC was reorganized into the National Agricultural Economic Research Institute (NAERI), which was under immediate control of the Ministry of Agriculture and Fishery(MAF). It was the first time that the institute sent its researchers to the USA to study advanced agricultural economics and rural development.

After the mid-1970s, rural region of Korea underwent huge changes as the result of rapid economic development and urbanization. As a result of rapid industrialization, population of the rural region decreased dramatically and the gap in standard of living between urban and rural regions sharply increased. In that circumstance, stabilization of rural communities by development of agriculture sector and promotion of agricultural income became the national policy agenda of the greatest importance. To manage the agenda properly, comprehensive policy research that covers vital issues that face rural communities was needed. Research subjects had to cover various social and economic issues with advanced analytical methodology. However, NAERI as a government institute could not perform long-term, high-quality research projects because it was not able to hire competent professional researchers in the field of social science. Mostly consisting of researchers with only master's degree or bachelor's degree, it was not able to deal with most policy agendas in depth autonomously.

To make matters worse, the superiors occasionally didn't receive higher education than their subordinates did, which means that the expert with high education couldn't lead the research due to the prevailing workplace norms of Civil servants' society. To summarize, being operated by bureaucratic system and operated only with public officials, NAERI could not hire competent researchers and perform broad, active researches at its discretion. The emergence of importance of economic approach and policy research for agriculture at that time originated from rapid structural conversion of Korean society in the mid-1970s. Agriculture and rural communities of Korea had undergone great change as the result of the unprecedented speed of industrialization and urbanization since the mid-1960s. Before the mid-1970s, the main purpose of agricultural policy had been increment of productivity in agricultural sector to escape from famine and indigence. The focus of the agricultural policy had been green evolution by the development of a high-yield variety of rice and agricultural extension thereof. The policies for promotion of agricultural income and rural development were conducted in light of this focus.

However, circumstances largely changed after the mid-1970s. The acceleration of industrialization led to the shrinking of agriculture and rural communities, which became major social problems. Being aware of the change, the economic policy designers decided that reducing the gap of income and quality of life between rural and urban regions would become a major agenda of the agricultural policy. Sustainable economic and social development of agriculture and rural regions became essential for balanced development of the country. Thus, the need for a specialized research institute on agriculture and forestry economic policy and rural development policy was highlighted.

As a result, the government decided to reconstruct NAERI into the Korea Rural Economic Institute (KREI), a quasi-governmental research agency. The purpose of this measure was in-depth research of short- and long-term agricultural policies with competent researchers, establishing the basis for agricultural policy research based on social science for development of agriculture and rural communities undergoing drastic changes in the course of national economic development. As an additional measure to develop KREI into an independent research institute for agri-forestry poly analysis, the government enacted the "Korean Rural Economy Research Institute Support Act," which played an important role in providing sufficient research fund and recruiting excellent researchers with high economic incentives.

Table 1. Historical Change of Agricultural Policy Institute in Korea

Time	Event
Sept. 1967	Agricultural Management Research Center (AMRC) was inaugurated at the Rural Development Administration (RDA)
Nov. 1973	AMRC was reconstructed to become National Agricultural Economic Research Institute (NAERI) under the Ministry of Agriculture and Fishery (MAF)
April 1978	NAERI was restructured to become Korea Rural Economic Institute (KREI), as a non-profit independent organization sponsored by the government
Dec. 1978	The Korean Rural Economy Research Institute Support Act was legislated and given special and favorable treatment
Jan. 1999	KREI became a member of the National Research Council for Economics, Humanities, and Social Sciences under the Prime

	Minister's Office
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Source: KREI

Corresponding to the purpose of its establishment, KREI has been contributing to the effective government policies for development of agriculture sector and rural communities for the past 38 years by conducting research projects in various fields related to agriculture and rural region with competent researchers. Additionally, many researchers from KREI have moved to the major universities in Korea as professors, and they are contributing to the quality of education in the field of agricultural economics and teaching students who subsequently become new researchers of KREI. In 1999, by the “Act on the Establishment, Operation and Support of Government-Funded Invested Research Institutions,” KREI became a member of the National Research Council for Economics, Humanities, and Social Sciences under the Prime Minister’s Office, obtaining further autonomy.

The history of direction of agricultural policy research in Korea can be summarized as follows. Before the mid-1970s, agricultural policy study was focused on efficiency of resource use for increase of productivity, efficiency of agricultural management and reform of trade system for the basis of commercial agriculture. After the mid-1970s, due to the acceleration of industrialization and globalization, deterioration of agriculture sector and rural community loomed large as important social problems. According to that, the agriculture policy study, after the inauguration of the KREI, was focused on enhancing competitiveness of agricultural sector in response to globalization, stabilizing farm income and management, and enhancing quality of life in rural region. Until the mid-1980s, the agricultural policy research was focused mainly on suggesting proper agricultural policy in the industrialized society. Other than that, KREI conducted various kinds of studies including farmland regulation, agriculture reconstructing, farm income enhancement, and rural development at that time.

Table 2. Direction of Agricultural Policy Study by Timeline

Time	Objective of Agricultural Policy	Main Direction of Agricultural Policy Study
1970's	<ul style="list-style-type: none"> - Production increase in food-grain - Increment of productivity 	<ul style="list-style-type: none"> - Efficient usage of resources - Efficiency of management - Reform of trade structure
1980's	<ul style="list-style-type: none"> - Farm income enhancement - Living enhancement in rural area 	<ul style="list-style-type: none"> - Finding new income source - Rural development
1990's	<ul style="list-style-type: none"> - Competitiveness enhancement - Income stabilization - Quality of life enhancement 	<ul style="list-style-type: none"> - Agriculture reconstruction - Safety net for farmers - Rural development & welfare
2000's	<ul style="list-style-type: none"> - Enhancement of value-added - Consumer-friendly agriculture 	<ul style="list-style-type: none"> - Finding new growth engine - Reinforced linkage between agriculture and food manufacture - Globalization of Korean food and agricultural product - Food safety and food culture education

After the late 1980s, the impact of agricultural market liberalization on the agricultural sector was negative. To cope with globalization of the agricultural sector, KREI conducted various studies to reduce the negative impact of globalization on agriculture and to assist the government in making trade agreements. After the mid-1990s with the launch of WTO system, KREI focused its studies mainly on establishing detailed policies to stabilize farm management and agriculture income, and to raise the quality of life of rural residents. In the 2000s, the scope of research vastly increased. Including precedential topics, KREI covered various policy issues such as discovering growth engines to augment the value added by agriculture, enhancing linkage between agriculture and food manufacturing, promoting agricultural export and globalization of Korean Food, and enhancing food safety corresponding to the demand of consumers.

KREI's Organizational Structure and Operation

Purpose and mission

KREI is a non-profit independent research institute sponsored by the government to conduct comprehensive survey and research for agri-forestry policy and rural community, suggesting policy direction and contributing to competitiveness enhancement of the agriculture sector and farm income increase. KREI consists of around 200 researchers including 70 doctors in various fields of study, conducting around 100 research projects per year regarding establishment of major agricultural policy, international trade, rural development based on village projects, etc. Other than research projects, as one of the biggest think tanks in the field of agriculture in Asia, KREI is operating several centers for conducting agricultural outlook, supporting fulfillment of FTA agreements, and evaluating performance of food policy. The purpose, mission, vision, strategy, and major mission of KREI are summarized in Table 3.

Table 3. Purpose, Mission, and Strategy of KREI and its Function

Legal basis of operation	Korean Rural Economy Research Institute Support Act (1978–1998) Act on the Establishment, Operation and Support of Government-Funded Invested Research Institutions (1999–present)
Purpose	Contribution to economic development and promotion of welfare in Korea by conducting overall research for agricultural and rural development
Vision	Becoming a global agricultural policy study agency leading sustainable future of agriculture and rural society
Strategy	<ul style="list-style-type: none"> • Establishing efficient system for research that leads national agricultural policy • Innovation of research environment and its organization culture • Improvement of practicality of research outcomes • Becoming a hub of agricultural policy study in Northeast Asia by conducting researches jointly with research institutes abroad
Major Missions	<ul style="list-style-type: none"> • Conduct surveys and research on mid-and long-term economic plans and policy measures for agriculture and forestry • Conduct surveys and research on short-term policies for agriculture and forestry • Conduct surveys and research on agro-food policies • Conduct surveys and research on welfare enhancement of farmers and fishermen and rural social problems

	<ul style="list-style-type: none"> • Conduct research on international cooperation in agriculture • Conduct research on market supply and demand and mid- and long-term agricultural market outlook through monitoring • Conduct surveys and research to improve public understanding of government policies on agriculture and forestry and conduct public opinion surveys and PR activities • Conduct research jointly with research institutes domestically and abroad • Conduct research projects commissioned by the government, public institutions, and private organizations domestically and abroad. • Offer education for public officials or members of other related organizations.
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Source: KREI

Organizational Structure, Budget, and Workforce

KREI consists of four departments, five centers, one audit office, one overseas office (Beijing, China), and three administrative offices. Annual budget is around 40 billion KRW, consisting of government contribution and nongovernmental commission, and around 250 staff, including administrative staff. KREI has signed MOU contracts with 46 domestic organizations and 14 overseas organizations to reinforce cooperation between related organizations and facilitate consilience between various academic fields, sharing information and conducting joint research programs. Moreover, in order to conduct field-oriented research, KREI constructed information network consisting of around 3,000 correspondents in each towns and townships, around 200 reporters in each city and county, and 11 overseas reporters in 10 nations.

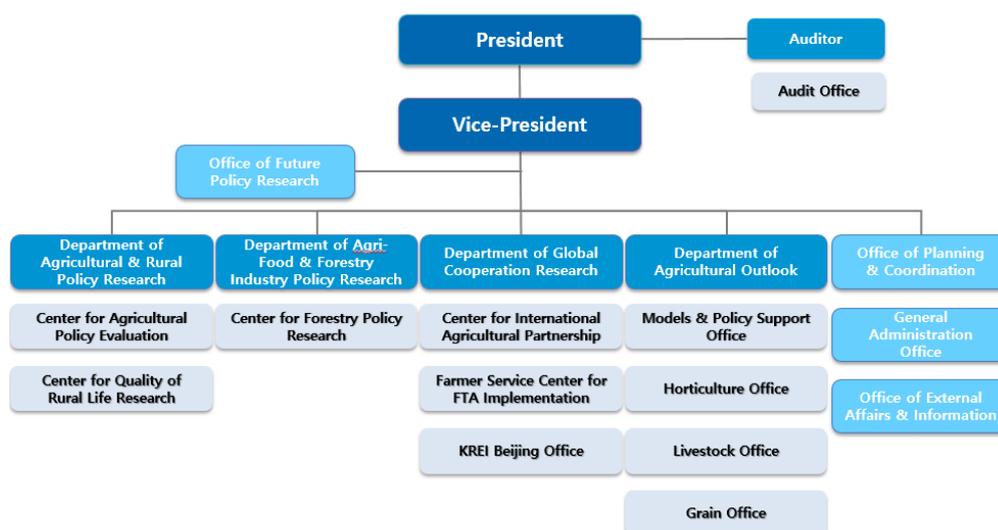


Fig. 1. Organizational Structure of KREI
Source: KREI

The budget of KREI has been increasing consistently since its inauguration in 1978. Starting from 579 million KRW in 1978, it amounted to 40,431 million KRW in 2016, showing an average annual growth rate of 11.8%. The share of budget for actual research activities, excluding fixed expenditure like wages, has increased from 36.8% in 1978 to 62.3% in 2016. The government contribution ratio of the total budget has been decreasing from 86.4% in 1978 to 40.8% in 2016, while ratio of the commission is showing consistent increase.

Table 4. Budget Trend of KREI by Timeline

Unit: Million KRW, %

Year	Total Budget (A)	Government Contribution (B)	Commission for Research (C)	Budget for Research (D)	B/A (%)	D/A (%)
1978	579	500	79	212	86.4%	36.6%
1990	3,822	2,964	858	1,153	77.6%	30.2%
2000	15,560	8,355	7,205	7,719	53.7%	49.6%
2016	40,361	16,462	23,899	25,147	40.8%	62.3%
Annual Growth Rate	11.8%	9.6%	16.2%	13.4%	-	-

Source: KREI

Note: Commission is paid by non-government organizations.

The number of workers in KREI has increased to 253 in 2016 from 101 in 1978, with 2.5% annual growth rate. The portion of researchers in total employee also increases to 80.6% from 42.6% during the same period. The share of researcher who are holding doctor's degree also increases to 38.2% in 2016 from 23.3% in 1978.

Table 5. Workforce Change of KREI by Timeline

Unit: Number, %

Year	Total Workforce (A)	Research Workforce (B)	Doctorate Workforce (C)	B/A (%)	C/B (%)
1978	101	43	10	42.6%	23.3%
1990	162	112	32	69.1%	28.6%
2000	214	168	55	78.5%	32.7%
2016	253	204	78	80.6%	38.2%
Annual Growth Rate	2.4%	4.2%	5.6%	-	-

Source: KREI

Major Research Fields by Period

KREI's research trends since its establishment can be summarized as follows. From the late 1970s to the mid-1980s, major research agendas were to respond to the reduction of rural population and recession of the farm economy due to rapid urbanization and industrialization in the process of economic development. In this regard, policy research on improvement of

rural settlement, development of off-farming income, agricultural labor, agricultural mechanization, land policies, and food supply were required to respond to changes of social-economic conditions. Due to those situations, KREI selected the following subjects as the basic direction of the research projects: comprehensive rural development plans, enhancement of agricultural competitiveness, development of structural improvement policy measures, price policy on agricultural and fishery products, and short-term tasks according to the requests of government, farmers' associations, and other institutions.

From the mid-1980s to the early 1990s, KREI's policy research focused on the improvement of farm-household debt, rural development, creation of non-farm income, and the improvement of agricultural marketing. During this period, the income gap between rural and urban areas increased, as well as the gap between living standards. In addition, at the end of 1980, due to the trade liberalization of agricultural products, KREI focused on the research related to agricultural trade policies, UR negotiation strategies, and enhancement of international competitiveness and structural improvement in rural area.

In the 2000s, KREI has started various researches in terms of making the effective strategy on Official Development Aid (ODA) for developing countries, pre-and post-assessment of FTAs with major trading partners, balanced regional development, introduction of various direct payment programs with welfare support to farmers, improvement of amenities in rural area, multi-functionality of agriculture, and agriculture structure adjustment with improvement of competitiveness. Nowadays, KREI is doing policy research particularly focused on international cooperation for the agri-forestry sector, close cooperation between traditional agriculture and food industries, agro-food export industrialization, intensification of competitiveness in agro-food industry, stabilization of farm management and farm income for preparation of expansion of trade liberalization in the era of WTO and FTA, systematization of safe production of agro-foods, strategies of rural development using multi-functionality of agriculture, and identifying new growth engines in agriculture. In other words, KREI has been changing research subjects and points in accordance with change of research demand due to changes of domestic and international conditions that affect Korean agriculture and rural areas.

Since the establishment of KREI in 1978, it has actively conducted agri-forestry policy research so as to find effective ways and options to solve the economic and social problems related to agriculture, forestry, and rural areas in Korea. Taking into consideration the policy conditions and circumstances of the times, KREI has increased the number of research project from 50 projects in the beginning stage to, recently, 125 projects on average annually.

Table 6. Average Annual Number of Projects and Research Subjects in KREI

Period	Subjects of agriculture policy research	Number of projects on average annually
1978-1985	Long-term strategies for agriculture development, Food self-supply with change of agriculture policy, Land policy, Price policy for Agricultural products, Agricultural labors and corporates, Agricultural mechanization, hybrid agriculture, Complex agriculture	50
1986-1990	Non-farm income, Overall plan for rural development, Land rent, Opening the wholesale market, Farm debt, Welfare system in rural area, Forestry development.	66

1991–1995	Agriculture trade policy, UR negotiation solutions, Improvement of competitiveness and rural area structure, Loan policy, Land policies, Agricultural corporates.	69
1996–2000	Assessment for loan policy in agriculture, Cooperative reform, Solutions for rice industry, Direct payment, Competitiveness study of each items, Technology development, Environment-friendly agriculture, Agricultural outlook	99
2001–2005	DDA negotiation in rice, China–North Korea agriculture, Local area agriculture policy, Stabilization of farm income, Agriculture information, Environment-friendly agriculture, Food safety management, Agricultural products export, Rural area welfare, Region development	121
2006–2010	FTA negotiation, Climate change and green growth, Agro-food industry development with promotion, Improvement of life quality for farmers, marketing system improvement, Vision plan for agriculture, Overseas agriculture development and ODA, Food industry development, Price stabilization, Employment increase, Production area marketing policy, New growth engine.	123
2011-current	FTA negotiation, Agro-food export, Food and marketing industry, Sustainable agriculture system, Employment increase, Natural science industry in agro-food, Overseas Agro-development with ODA, Agriculture in reunification, 6th industrialization in agriculture, Agriculture modernization with ICT convergence.	125

Source: KREI

In the last 40 years, from 1978 to 2016, the scope of research projects conducted by KREI could be divided into five sectors: Agricultural structure, Agro-food industry, Rural development, International agriculture, and Forestry development. Main research topics by sector are expounded below.

First, the research in the field of agricultural structure mainly studies macro agricultural environment, agricultural system and land policies, agricultural labors and corporates, and agriculture finance. This research is aimed at not only formulating policy directions and options for improving agricultural structure, but also analyzing the overall index of agriculture with a macro viewpoint. In other words, KREI predicts overall agricultural outlook in terms of farm population, arable land area, agriculture production, agricultural price and marketing, and supply and demand analysis of major agricultural items considering changes of agriculture conditions. Based on these studies on agricultural structure, KREI has contributed to developing the policy for improving agricultural structure and enhancing agricultural productivity. Particularly, research projects for improving agriculture structure were increasing massively after the mid-1980, which was because commercial farms were growing fast with having various forms in Korea. In addition, since the launch of WTO in 1995, research projects on agricultural structure have been focused on enhancing international competitiveness of Korean agriculture. The research on farmland as a basis of agricultural production has continued for making appropriate policies for national land conservation and development, land possession and utilization. Research for fostering agricultural labors and corporates is also ongoing to cope with the lack of agricultural labor

and aging due to the drain of rural population in the process of industrialization. Research on agriculture finance has been conducted for suggesting investment policy directions in the agricultural sector and proposing financial policy alternatives for facilitating money flow in farming activity.

Second, the research on agro-food industry seeks to analyze the value chains from input industry to food processing industry. This area's research is for formulating agri-business policy directions and options for enhancing value-added elements in each stage of value chains related to the agricultural sector. In the 1970s and 1980s, many studies in the field of agro-food industry focused on commodity market analysis in order to improve productivity and efficiency for farm income stabilization. According to agricultural market liberalization since the 1990s, the focus of research has switched to international competitiveness analysis for each item and agri-business management for consumer-oriented agriculture, environment-friendly agriculture, agro-food marketing, and food safety. Particularly, research for consumer-oriented agriculture (i.e. standardization, classification) and invigoration of the food processing industry using domestic agricultural products has been ongoing since 2000s. By item, there has been a lot of research on the rice industry. Main research topics on the rice industry are about stabilizing supply and demand, economic impacts of price and income support programs, and farm income stabilization.

As horticulture farming has been rising as main cash crops since the 1980s, studies on the horticulture industry have mainly focused on formulating the industry development strategy. Main research subjects in the horticulture industry are about stabilization of supply and demand, enlargement of exports, improvement of marketing efficiency, and process ability. Research on livestock industry has been traditionally about market stabilization, market analysis by species, productivity and quality improvement, and stabilization of feed-grain markets. Recent research topics on livestock industry have been focusing on improving international competitiveness for coping with trade liberalization of livestock products since the mid-1990s. In the 2000s, it focused on the ways to deal wastes from livestock with environment-friendly methods, quarantine system for livestock epidemic diseases alternatives for production, and marketing for consumer-oriented livestock products, food safety management, and livestock industry stabilization. Since the end of the 1970s, the importance of agricultural markets and distribution has increased, and there has been a steady stream of research on agricultural marketing. By the 1980s, research on construction, management, and operation of public wholesale markets was largely conducted. In the 1990s, there were studies on diversification of marketing channels, cooperative joint marketing, direct transaction from farmer to consumer, and e-commerce. Studies on the food industry, which is currently receiving a lot of attention as a new growth engine for agriculture, are about collaboration of agriculture, the food processing and food service industry, food production and consumption analysis, agro-food certification, health functional food, etc.

Third, KREI's studies on rural development include the analysis on rural society change, non-agricultural income, local industry invigoration, living standard and welfare of rural area, rural life environment and life quality improvement, and region development plans. The purpose of the studies on rural development is to reduce the gaps of income and living standard between rural and urban areas. In the process of industrialization and urbanization, the empirical analysis on rural communities plays a vital role in formulating rural development policy. Studies in the 1970s and 1980s were mainly focused on activating rural economy and creating non-farm income sources through small industrial complexes in rural areas, agricultural product processing business, and farm tours. Due to the shortage of rural

labor since the 1990s, labor costs in rural area have sharply increased and corporates have had difficulties in doing business in rural area. Thus, KREI has started to research for creating off-farming income through the provision of tourism, experience, and recreation in rural villages. Lately, KREI is researching activation of local festivals and green-tourism using agricultural resources and rural amenities in rural areas. In addition, studies on 6th industrialization, where traditional agriculture is linked to food processing, marketing, and tourism industry have been underway. Studies seeking improvement of environment and quality of life in rural areas and long-term plans for regional development are continuing steadily with focuses on pension and healthcare insurance, aid for infants, and medical and education support in rural regions.

Fourth, studies on international agriculture cover various scopes and issues such as agriculture trade policy, foreign agro-food policies, and overseas markets including major countries (US, Japan, China, etc.), WTO multilateral negotiation, and FTA bilateral negotiation and ODA policy in the agricultural sector. Until the 1980s, the research on agricultural trade regime and policy direction was mainly conducted. Since 1990s, KREI's main research on agricultural trade is about analysis of the effects of trade liberalization on Korean agricultural sector, seeking for effective policy measure to prepare for the agricultural market liberalization through WTO system and various FTAs with major trading partners. In addition, research on North Korean agriculture for preparation of reunification and ODA cooperation with developing countries are continuously underway.

Last, the research on forestry development and policy is widely divided into the fields of forestry area, mountainous villages and districts, forest resources, and forestry industry. Forests and mountain village studies were done for forest development to expand arable land and grasses until the 1970s. In the 1980s, reasonable usage of forest, effective maintenance, and forest development plans were researched. Nowadays, new income source development for mountain villages and forests, non-commercial and public values in forests and mountain villages are being researched. Researches for forest resources are related to the developments of forest resources as tourism resources, uses of bio-materials and timber industry. Since the 1990s, forest resources development with effective use and long-term plans for forest resource development researches has been primary tasks. Research on the forest industry has suggested ways to supply stable forest plants as a basis of afforestation with reasonable prices and to enhance potential uses for the forest industry. Recently, research on the construction of forest product marketing complex with economic feasibility analysis has been done to seek ways to invigorate forest product consumptions. In addition, research for income source development with herbs, industrialization of wood vinegar and wood coal, and recycling useless wood residuals are now underway.

Table 7. Main Policy Research Subjects by Area in KREI

Field (Large)	Field (Middle)	Subjects
Agriculture Structure	Macro indexes in agriculture, Prospects, visions	- Macro agriculture, prospects vision, future strategies - Flow of agriculture structure change, traits, solutions, etc.
	Farmland	- Land possession, land rent, land development, irrigation, mechanization - Harmonization of national land development and environment plans

	Labor and corporate	- Labor training, agriculture management with agricultural corporates
	Income	- Income improvement and stabilization - Income source analysis(agriculture, non-agriculture) and plans
	Finance	- Agriculture finance efficiency, agricultural fund - Coop reform, ways of promoting some items for coop
Agro-industry	Food Crops (Rice, Barley, etc.)	- Food crop management, supply and demand, price, marketing, income stabilization - Ways to use paddy and self-supply rate improvement
	Horticulture	- Vegetables : supply and demand, supply and demand, price, marketing, income stabilization - Fruits: supply and demand, price, marketing, income stabilization - Flowers: supply and demand, price, marketing, income stabilization. - Special products : supply and demand, price, marketing, income stabilization
	Livestock	- Cattle : supply and demand, price, marketing, income stabilization - Swine : supply and demand, price, marketing, income stabilization - Poultry : supply and demand, price, marketing, income stabilization - Dairy products : supply and demand, price, marketing, income stabilization
	Marketing	- Producers, wholesale market and retail markets - Marketing facilities, logistic center (distribution center) economic feasibility analysis
	Food	- Traditional food industry promotion - Food processing with agriculture, invigoration of food service industry
	Environment-Friendly Agriculture	- Environment-friendly agriculture and livestock industry, agricultural waste recycling - Quality certificate with mark
	Agro-Materials	- Seed, fertilizer, pesticide, machinery industry analysis
	Rural development	Rural Society Changes
Rural Economy Invigoration		- Non-farm income source creation, Agriculture complex, Rural tourism, Rural industrialization
Rural Life Environment		- Rural residence, rural development plans(by area)
Rural Welfare		- Rural society safety net, pension, insurance, health, medical service, education, culture
International	Agriculture Trade	- import and export analysis, basic research for

Agriculture		trade policies
	WTO	- WTO agreement in agriculture, Multilateral negotiation trend analysis - Effect analysis in agriculture, negotiation strategies
	FTA	- FTA agreement in agriculture, bilateral negotiation trend analysis - Effect analysis in agriculture, negotiation strategies
	Overseas Agriculture	- Agriculture policies and trends of major countries (US, China etc) - North Korean agriculture - Agriculture in developing countries and ODA
Forestry	Mountain and Forest	- Economic feasibility analysis for forest and mountain development
	Forest Resources	- Forest resource use, timber industry, eco-tourism
	Forestry	- Production, consumption, marketing, price analysis to forest products

Source: KREI

The Korea Rural Economic Research Institute has been implementing policy research to support the development of key national projects in the Korean agri-forestry sector and rural area. KREI has actively been exploring and analyzing the future strategies for sustainable agricultural and rural development.

Nowadays, KREI focuses all abilities on researching strategies and policy direction not only for development of rural areas and agriculture, but also for overcoming structural problems from aging population and market opening in the agricultural sector.

Under the goal to be a globalized institute for agricultural policies that lead future sustainable growth in Korean agriculture, KREI set 5 goals: (1) Long-term prospect for agriculture, rural areas, and food industry with consideration of agriculture policy direction, (2) developing agriculture and livestock industry with creative innovation, (3) stabilizing supply and demand of agricultural and livestock products, (4) local community invigoration and welfare support for farmers, and (5) response to changes of internal and external conditions effectively and promotion for ODA.

Selection and Evaluation of Research Projects

KREI performs its own research projects, government-commissioned tasks, research projects entrusted by other institutes, and joint research projects. KREI's own research projects set agricultural policy directions, considering the agricultural and rural economic conditions and urgent issues, and provide clues to the solution of agricultural policy research. Prior to the Council's deliberation, the institute has careful consideration procedures over all projects applied by researchers through frequent research planning and coordination meetings. KREI's own research projects are conducted with the institute's own budget. They are divided into basic projects, conducted through deliberation by the board of directors, and occasional projects, conducted by the institute's own decision to respond to the current issues of

agricultural policy. Recently, the research tasks required are remarkably increasing from the government, related research institutes, relevant organizations, and farmers' organizations as the status of policy research institutions is enhanced

The government-commissioned research projects and the entrusted projects are conducted through the deliberation by the research planning and coordination committee. The committee decides whether to perform these projects after evaluating the necessity and possibility of conducting them. In addition, short-term occasional projects can be conducted with the KREI's own budget if urgent issues are raised.

For the selected task, a research director is designated. The research director organizes a research team and selects internal and external experts as advisors. Every research project is scored and evaluated by the evaluation committee according to the study's scope and difficulty, application of proper date and methodology, and goes through study design, progress reports, and a final report seminar. In addition, in order to manage the progress and quality of the research, its progress and plan are reported at a weekly work report meeting. If necessary, the research council is held for reflecting experts' opinions and improving the quality of research. The final evaluation of study results is conducted through the evaluation committee when the research project is completed. They check the awareness of topic, research achievement, the suitability of analytical methods, logicity and utilization of research results, and sincerity. Moreover, various efforts are made to improve the research quality including providing the incentives for excellent projects and researchers.

The study results are published as reports. The reports can be categorized as own research reports, policy research reports, and entrusted research reports. Since 2003, according as the need for enhancing the public accessibility to policy research results has increased, KREI provides the reports through not only publications in various formats but also through the internet. Such efforts have helped KREI to be a key think tank in the field of agricultural, rural, and food policy. In addition, it can be appraised that KREI has improved the quality and practicality of research results through a customized result diffusion system and field concentrated research performance.

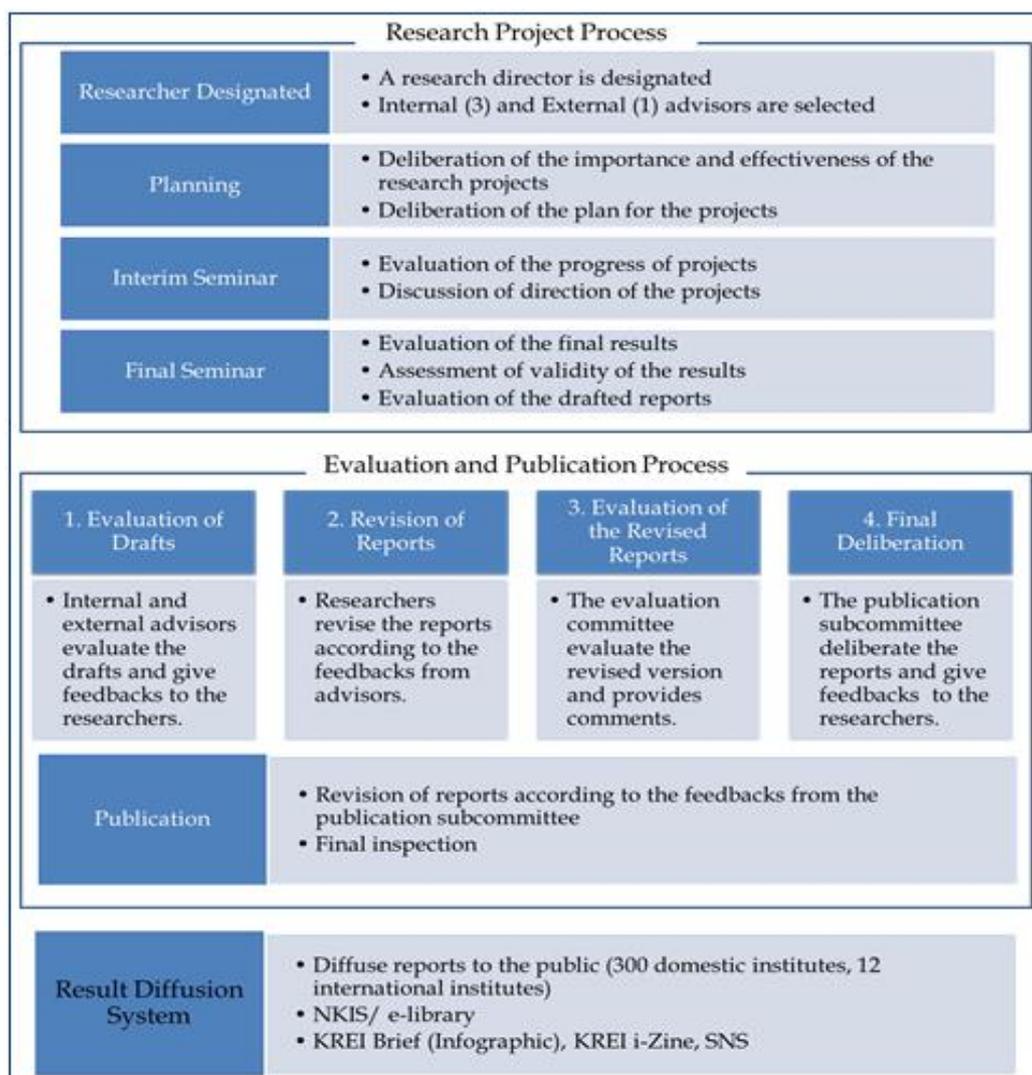


Fig. 2. KREI's Research Projects Management System
 Source: KREI (2017) e-brochure, KREI homepage (<http://www.krei.re.kr>)

KREI Reporter and Other Cooperative Relations

KREI has operated the system of "Local Correspondents" and "KREI Reporters" to identify rural villages' problems and to find difficulties related to rural community and agriculture through collecting and analyzing farmers' demands more systematically, and to increase the central government's and farmers' understanding of policy issues. The Local Correspondents system seeks to survey farm households in rural villages by phone or mail about opinions on major agricultural policies, farmers' awareness, and track the rural economy's current situation, and so on. Under the local correspondents system, KREI has more than 3,500 local correspondents as of 2016, and they regularly provide their region's opinions about agricultural policy, farmers' awareness, and the rural economy's current situation to the institute. The KREI Reporters system is used for establishing the field information and human networks between rural communities and the institute, to create the basis for

cooperation and communication, and to strengthen research services for the people. With 200 reporters as of 2016, it successfully collects the public opinion on agricultural policy on a regular basis. Since 2009, through KREI Reporters, the institute was able to conduct about 140 research activities including agricultural policy focus and research surveys, and various forums and media activities. In addition, KREI is sending the policy information and the research reports about 40,000 policy makers and research costumers through various methods, online and offline, and so on.

Recently, KREI is recruiting the members for monitoring food demand trends in urban areas and producing the data for consumers' behavior and consumption patterns. The Agricultural Outlook Service collects data from sample farm households of product lists, breeds, quantities, farm prices, plant area, crop conditions, etc. In addition, in cooperation with 64 external institutions, KREI has actively improved its research capacity.

Table 8. KREI's Cooperation System

Type	Roles and Functions
Local Correspondents	- 3,000 local correspondents provide their region's opinions about agricultural policy for the institute regularly
KREI Reporters	- 189 domestic reporters collect the public opinion on agricultural policy regularly - 20 international reporters collect the data from overseas issues
KREI Monitor	- Domestic members monitor the food demand trends in urban area and produce the data for consumers' behavior and consumption patterns - International members collects data from overseas
Agricultural Outlook Service	- Sample Farm Households: collects data of product lists, breeds, quantities, farm prices, plant area, crop conditions, etc. - Local Advisory Council: consists of local experts; collects data of plant area, crop condition, farm price, etc. - Central Advisory Council: consists of public officer, or association member; requests for consultation and deliberation of monthly periodicals
Other Cooperative Relations	- National (49): includes universities, research centers, and institutes in relating field - International (15): includes major research centers and institutes of other countries

Source: KREI(2017) e-brochure, KREI homepage (<http://www.krei.re.kr>)

Core Factors of KREI's Development

KREI was formerly the Agricultural Management Research Center (AMRC) under the Rural Development Agency in 1967. Recognizing the importance of agricultural policy research, the AMRC expanded into the National Agricultural Economic Research Institute (NAERI) under the MAF in 1973. After the enactment of the KREI Support Act in 1978, KREI was established as a non-profit institution with a purpose of contributing to the nation's economic development and the enhancement of public welfare by conducting comprehensive surveys and research on the agricultural and forest economy and rural community development.

It can be judged that KREI has successfully provided clues to the solution of problems due to internal and external changes by globalization and industrialization of our economy. In addition, it also can be judged that KREI actively responds to the new research demands and

enhances innovation competence through the education and training of its staff.

KREI has been conducting various research projects regarding issues like short- and long-term agricultural economy development plans and policy, agricultural and food policy, rural community's welfare and social problem, international cooperation, and supply and demand stability. In addition, it has actively informed the importance of agricultural policies to the public and gained understanding of the people. After 1990, under the WTO/FTA era, KREI has concentrated on improving competitiveness of Korean agriculture by studying international trade and commercial policy, the development of higher-value-added business, and the generation of new demands of both in domestic and international markets. In addition, considering the needs to meet the demands of various agricultural administration policies, it has established many sub organizations like the Agriculture Outlook Center, Center for FTA Implementation Support, Center for International Agricultural Partnership, Quality of Rural Life Research Center, and Center for Agricultural Policy Evaluation. KREI also publishes various types of periodicals, diverse reports, and journals to spread research results.

There are six critical factors in which KREI has successfully conducted various research projects and government tasks. First, the enactment of the Korean Rural Economy Research Institute Support Act, 1978, helped the institute to recruit excellent research personnel. Prior to the act, there had been a limited budget and complicated operations system. Consequently, it was hard to recruit scholars from abroad and ensure research autonomy. However, after the enactment of the special act, KREI successfully recruited researchers by offering many incentives, including guarantee of research autonomy.

Second, it helped to improve the cooperation system with the government that KREI reorganized the research teams according to the government tasks. This allows KREI to support the government directly for developing new policies. The efforts to pursue the effectiveness of cooperation comprise the key advantage that KREI's researchers could perform with better understanding of the field of Korean agricultural policy.

Third, a strict assessment system improved the research quality. KREI conducts policy studies regarding latest agricultural issues and supports the government in preemptive actions against effects of structural change of environment. As a result, KREI receives support not only from the field of agriculture but also from the local governments and various organizations. It can be judged that KREI has been a think tank in the field of agricultural policy according to the changes of the times, researching the directions of agricultural policy for 40 years.

Fourth, formation of a manpower cultivation system allowed the sustainability of the institute. Although KREI does not directly support training scholars, many professors who used to work for KREI train their students, and KREI hires the students after graduation. This virtuous circle of supply and demand of manpower allows the institutes to stabilize the pool of skilled employees. In addition, KREI recruits researchers at the doctoral level from academic networks and conferences.

Fifth, it is a critical factor that the former researchers of KREI who are assigned to important posts now act as supporters to raise the status of the institute and to spread the importance of agricultural research activities. The former researchers of KREI are often recognized as university professors, the Minister of Agriculture, Food, and Rural Affairs, or the Chief Presidential Secretary. For instance, it is common that the university professors at the Department of Agricultural Economics have an experience working at KREI. They act as important roles influencing both education and academic activities.

Last, it has improved the practicality of research and is trusted by the people by customer-

oriented and field-oriented research. For example, KREI constructed a field-oriented research system by establishing KREI Monitor and KREI Reporters. In addition, it has improved the research capacity by cooperation with other institutes and universities.

These various factors combined, KREI has carried out high-level research tasks that respond to changes in domestic and international conditions surrounding agriculture and rural areas. As a result, the institute has continued to develop with its motto “high pride, broad perspective, in-depth research.”.Especially, KREI has been a think tank in the field of agricultural policy, which performs accurate analysis and diagnosis for the establishment of the direction of Korean agriculture.

References

Korea Rural Economic Institute. 1988. History of Korea Rural Economic Institute for 10 years (1978—1988).

Korea Rural Economic Institute. 2008. History of Korea Rural Economic Institute for 30 years (1978—2008).

Korea Rural Economic Institute. 2015. *Agriculture in Korea*. Seoul, Korea.

Korea Rural Economic Institute (2017), <http://www.krei.re.kr>

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