

KOREAN AGRICULTURAL POLICY: PAST, PRESENT AND FUTURE

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I. Introduction

Korea is a peninsula stretching north to south, and characterized by abundant hills and mountains. Located in a temperate climate zone, and surrounded on three sides by the sea, Korea enjoys mild weather, lush forests, a unique culture, and a specific lifestyle. With such characteristics for farming, Korea has had a long history of agriculture deeply rooted in tradition. Korean farms, like those of many other monsoon Asian countries, traditionally have been small subsistence farms. Of the 99,000 km² of total land, approximately 22% is arable and some of that is in the form of small plots scattered in the mountainous areas of country. This places Korean agriculture and farmers at a decisive disadvantage.

Moreover, Korea's development strategy has been mainly focused on the manufacturing sector rather than the agricultural sector. So in the process of rapid industrialization in Korea, the increased discontent of the underprivileged rural population due to the widened urban-rural disparities has deepened social conflict and has emerged as a major bottleneck to the nation's further development. Farm population has been decreasing since the late 1960s due mainly to migration to urban areas. The share of farm population decreased from 44.7% in 1970 to 14.0% in 1991. Many rural inhabitants moved to the city to become industrial wage earners, which is not unusual in developing countries, but the rural-to-urban shift in Korea was more pronounced than in other countries. Rural living standards have

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improved, but average rural incomes are still considerably below average urban incomes. The disparity is not likely to narrow in the immediate future. Despite the decrease in farm population, agricultural production has increased until recently due to productivity gains, but since the late 1980s it has been fluctuating or decreasing, as Table 1 shows. It is evident that as industrialization and urbanization progress and new technologies and mechanization are introduced in agriculture, the farm population will decrease further.

Currently Korea faces the big task of market opening. In particular, the recent agreement made at the Uruguay Round multinational trade talks will have a tremendous impact on Korean agriculture.

Right now, the government is launching an ambitious structural adjustment plan to overcome the unfavorable circumstances in the face of market opening. In this regard, Korean agriculture is about to reach a turning point. The next 10 years will be very critical.

TABLE 1. Agricultural Indicators of Korea

Year	Population	Agricultural Production	Growth Rate	Agricultural Imports	Parity Ratio
	Thousands	Billion won	%	Million \$	%
1970	14,422 (44.7)	6,846	-	445	100.1
1975	13,244 (37.4)	8,697	-	1,413	112.3
1980	10,827 (28.4)	7,656	-	3,314	106.0
1985	8,521 (20.8)	10,352	-	2,511	100.0
1986	8,150 (20.8)	10,830	4.6	2,537	98.4
1987	7,771 (18.7)	10,098	-6.8	3,012	101.5
1988	7,272 (17.3)	10,903	8.0	4,328	105.9
1989	6,786 (16.0)	10,780	-1.1	5,485	102.9
1990	6,661 (15.6)	10,232	-5.1	5,789	105.9
1991	6,068 (14.0)	10,147	-0.8	6,931	100.8

1. Numbers in parentheses are the ratio of farm to total population

2. 1985 constant prices

Source: Korea Economic Indicators, Yearbook of Agricultural and Fisheries Statistics

II. What Are the Problems of Korean Agriculture?

As the economy has expanded and developed, the role of agriculture in the national economy has decreased. But a large proportion of the population is still employed in agriculture. Farm population in 1990 was 6.7 million people and about 1.7 million farm households. Approximately 60% of the workers are full-time farmers, with nearly half of their farm income dependent upon the sale of rice. The percentage of elderly farmers also is increasing rapidly.

Second, Korean agriculture still has a poor production base and infrastructure including inadequate irrigation, drainage, land consolidation, rural road networks, etc. Twenty-seven percent of the paddy land is still rain-fed; 43% (577,000ha) of the road network is seriously underdeveloped; and only 55% of it is paved. That compares poorly with the urban areas in which 90% of the roads are paved.

Third, average farm size in Korea is still merely 1.2 ha. In 1991, about 60% of farm households have less than 1.0 ha of land, 30% between 1 and 2 ha and 10% more than 2 ha. The small size of Korean farms becomes especially evident when compared with farms with farms in other countries. Although the average size of Japanese farms in 1991 was 1.4 ha and that in Taiwan was 1.2 ha, the corresponding figures for developed countries such as the United Kingdom and the United States are 70 ha and 180 ha, respectively. Such small-farm structures have been major constraints to capital accumulation and the expansion of farm investment.

Fourth, rice is the major crop in agricultural production. Rice is the dominant as well as the most important crop for the Korean people, and it has played a vital role in Korea's socio-economic stabilization. About 85% of small family farms are engaged in rice production, and 64% of arable land is allocated to rice production. In addition, 44% of Korean farm income is derived from rice.

The fifth problem is the situation of farm economy. Farm household income in 1990 was 11 million won (US\$ 15,500) and that included 4.7 million won (43%) of off-farm income. But farm income is only 83% of that earned by the average urban household. The income levels of the urban and rural areas were almost the same until the mid-1970s. However, since that time, the gap has widened.

Furthermore, as a result of concentration on a limited number of profitable crops and livestock products, Korean farmers are frequently plagued by overproduction and price fluctuations. These problems have resulted in dwindling income at a time when education, medical, and other necessary expenses are increasing at an alarming rate. This situation has left the majority of Korean farmers unable to cover their increasing debts with farming income alone. Between 1980 and 1990, farm debt increased at an average annual rate of 30.2%.

Finally, the ever-widening disparity in income and living benefits between city dwellers and those in the rural areas has demoralized the rural population. The wide gaps on the opportunities to enhance income and receive a high-quality education have triggered a massive migration from rural areas into urban centers, resulting in traffic congestion, housing shortages and other social ills in urban areas.

As a consequence, rural areas have been suffering from a serious shortage of farm labor resulting from a decrease of more than 85% in the number of young farmers (under age 30) in the past 15 years. This is a serious loss in both quantity and quality to the labor force in the agricultural sector. The exodus of young farmers from rural areas had caused the number of older farmers (over age 60) to rise from less than 10% in 1980 to 18% in 1990.

III. Agricultural Policy Over the Past Years

In the early 1960s, the first attempt at a systematic plan to develop the agricultural sector was made in line with the first Five-Year Economic Development Plan. The utmost objective for agriculture in the 1960s was to increase production as the country had suffered from a chronic food deficiency. With investment in fertilizer and pesticide industry, productivity improved dramatically. During the 1960s, rice production increased by 30% from 3 million to 3.9 million metric tons.

In the 1970s, the major goal of agricultural policy was to attain self-sufficiency in rice, the major crop. The government encouraged rice production mainly by introducing high yield varieties, and by supporting prices and providing subsidies for intermediate goods such as chemical fertilizers and pesticides. During the late 1970s farm

mechanization was launched by supplying small-size tractors and combines.

As a part of efforts to increase rice production, a dual price system was introduced in 1969. Under the system, the government sets a purchasing price every year which is usually higher than the market price in the harvest season. Clearly the farmers want to sell their products to government as much as possible. But the government cannot buy all production because of the financial burden. The amount and the price are usually determined politically. When the market price goes up, rice held in government stocks is sold at a lower price to stabilize the market price.

Large-scale irrigation projects were also implemented in the early 1970s. The projects were financed partly by the World Bank. Substantial investment was made on irrigation and drainage, land rearrangement, etc. Such improvements in infrastructure played an important role in increasing land productivity. Tideland reclamation was included in some irrigation schemes as the west coast is suitable for such purposes.

The New Community Movement (Saemaul Undong) in the early 1970s, which aimed to transform traditional farm society and make it compatible with modern industrial society, was a priority in agricultural policy at that time. Even though the absolute number of farmers and the portion of agricultural production in GNP decreased, farmers were encouraged very much. As total grain production grew steadily, Korea became self-sufficient in rice and barley in the late 1970s. The introduction of high-yield varieties of rice definitely promoted productivity. During this time the agricultural sector showed 5.9% annual growth.

But the rate of growth in agricultural productivity, rapid by international standards, was not rapid enough to keep up with the growth in the industrial sector. The growth rate of real per-worker output in manufacturing was almost twice that of agriculture. Inter-sectoral terms of trade did not improve for agriculture. Consequently, the levels of income and living for farm households lagged behind those for urban households.

Farmers began to react against the deterioration in their economic position by taking group action to force government responses starting in the late 1980s.

The dual price system for rice continued to be the major price support scheme for farmers in the 1980s. The political demand to support prices took the form of pressuring the government to raise the government purchase price. By the late 1980s, the support price was four times the world market prices. The high price of rice may undoubtedly have contributed to increasing farm household income, but it has reduced consumers' welfare not only by forcing them to pay higher taxes and prices, but also by obstructing the shift of resources from rice to such products as livestock and vegetables. Even more wasteful was the accumulation of surplus rice in government storage.

The dual price system is often criticized for distorting resource allocation, but many others still support the system as they think the government could have achieved both farmer's income support and price stabilization effects at the same time through this policy. Whether the system will be maintained throughout the 1990s is under debate. As agricultural policies should be directed more on direct income support in order not to distort production and international trade, it is time to reconsider changes in the price support scheme.

In hand with income growth, food consumption behavior has changed significantly. Formerly rice was regarded as the most important and basic product so agricultural policies were mainly centered on attaining self-sufficiency in rice. But per capita rice consumption tended to decrease and consumers began to spend more on fruits, vegetables and livestock products. In particular, consumption of meat and other livestock products has been increasing sharply since the mid-1970s. As the land resources were very limited, Korea could not allocated large quantities of land to feedgrain production and pasture development, and hence the importation of feedgrains increased very fast. Consequently, self-sufficiency in total grains has decreased to less than 40%.

Until recently, major agricultural products have been under import restriction to protect domestic producers. Despite such protection, imports of agricultural products have expanded sharply. And with the Korean economy growing, many trading partners of Korea increased pressure for trade liberalization. Korea is obliged to liberalize protected commodities gradually until July 1997, due to the BOP agreement in 1989. Korea has been removing trade barriers on agricultural commodities according to the schedule.

TABLE 2. Import Liberalization Rate in Korea

Year	1980	1985	1990	1991	1992	1993	1994 ²⁾
Overall(%)	68.6	87.7	96.3	97.2	97.7	98.1	98.5
Agriculture ¹⁾ (%)	49.4	69.7	83.4	86.3	88.4	88.6	89.8

1) Including forest and fisheries products

2) Planned

Since the BOP agreement in 1989, the government has continued to implement the three-year agricultural import liberalization plans announced in 1989 and 1992 respectively. In accordance with the plans, the import restrictions on 286 items(HS 10-digit basis), including bananas and pineapples, were lifted in 1989-1992. And this has led to a sharp increase in agricultural imports. In 1991, Korea's total agricultural imports stood at US\$ 6.8 billion, representing an increase of 2.7 times over 1985.

Along with market-openings, reductions of tariffs on agricultural products will continue in line with the five-year(1989-1993) tariff reduction program. By 1993, the average tariff rate on farm products will have been lowered to 16.6% from 19.9% in 1990. Through these measures, Korea is progressively expanding market access opportunities for exporting countries, notwithstanding the hardship shouldered by the Korean agricultural sector.

IV. Government's Restructuring Plan at Present

Looking back on the 1980s, Korean agriculture has experienced many difficulties, such as the shift of comparative advantage in favor of manufacturing, the market opening pressures from abroad, and so on. In the course of such difficulties since the mid 1980s, Korean policy makers have implemented several medium-and long-term plans to increase investment especially in farm infrastructure and marketing facilities, and have begun to introduce institutional changes.

In April 1989, the "Comprehensive Master-Plan for Rural Development" was drawn up by the Ministry of Agriculture, Forestry

and Fisheries (MAFF). It aimed at improving the agricultural structure, and enhancing rural living standards. In 1991, on the basis of this plan, MAFF issued the "10-Year Rural Structural Improvement Plan", which started in fiscal year 1992. The plan focuses on improving agricultural productivity, enhancing competitiveness through the development of a market-oriented price system, and facilitating modernization and mechanization from the production site to the distribution network. This plan also stresses the revitalization of rural communities and diversification of farm household income.

The underlying basis for the plan is the belief that there is no alternative other than attempting structural reform to solve the present agricultural problems. Special emphasis has been placed on policies relaxing regulation of the use of farmland, lifting farm size limits and encouraging alternative uses for farmland. The goal is to expand the scale of farm operations, sustain agricultural production, and transfer land to young farmers.

The specified sub-plans of the program aim to : (1) achieve economies of scale by relaxing legal limits on maximum farmland ownership, special long-term credits for enlargement of farm size, and infrastructural development, (2) expand job training and employment programs for those who want to leave farming or hold multiple jobs, (3) diversify the structure of the rural economy including rural industrialization and introduction of third-sector industries, (4) improve rural living conditions, including education, health care, housing, water supply, and sewage systems.

The most important element for maintaining Korean agriculture is to keep young farmers in agriculture, In 1990, 18% of 6.7 million farmers are over 60 years old, as mentioned previously, and 34% of farmers are between 20-50 years old. MAFF launched a program to support active young farmers willing to be involved in agriculture, and established practical training programs for studying advanced farming techniques at home or abroad. Low-interest loans have also been provided for them.

Development and management of agricultural land and water resources are essential. Land development and water resource management programs require large investment, and take a long time. More than 9 trillion won will be spent in this area over the next ten years under "the Structural Improvement Plan".

A poor marketing system has been bothering farmers for a long time. Marketing channels are complicated and sufficient market information is not sent to farmers, causing disadvantages. MAFF implemented several short-to-mid-term programs. Building large-scale wholesale markets in metro areas and providing storage facilities to farmers are popular programs currently. The operation of a nationwide computer system for price information also helps farmers very much.

Research and development of technology are other important elements for agricultural reform. The Rural Development Administration, a government agency under MAFF, directs research activities. Some of them are joint programs with private enterprises. Areas of research include improving productivity, developing new varieties, establishing off-season production techniques, and diversifying harvest seasons. Comprehensive rural development projects are underlay to improve poor rural living standards. Country-level rural development programs include building modern houses, providing off-farm employment, and other improvements to rural infrastructure and services.

On the other hand, faced with strong pressures to liberalize agricultural imports, Korean agriculture has been urged to achieve structural adjustment to compete in an internationally open market. The basic factor limiting agricultural productivity, small farm size, will not improve substantially in the near future in spite of the restructuring plan as the land itself is so limited. Hence, an effective land rental market is expected to be developed while stable employment opportunities will be increased in non-agricultural sectors. With the development of a commuting system in the future, urban workers as well as farmers will reside more in rural areas. To meet these demands, rural housing, education, and public services will be policy priorities in the future.

V. Policy Directions in the Future

First of all, it is necessary and urgent to reconfirm policy goals in the agricultural and rural sectors for the 21st century on the basis of national consensus. These goals should include the process of readjustment of investment priorities and rearrangement of institutions.

There are three objectives for future agricultural and rural policy. The first one is to redefine Korean agriculture as a "life industry", one

which should not be neglected or overemphasized, as the stable food supplier and the last resort of environmental protection for the nation. For this, Korean agriculture must become a self-sustained real industry based on competitiveness by all means. No longer can Korean agriculture be an unbearable burden to the national economy. It should stand by itself as a truly competitive, sustainable industry, internationally as well as domestically.

Agriculture is not simply labor-intensive farming or merely cultivation at this moment. Already, it is a capital- and technology-intensive, high value-added, growing industry, not a declining industry. It is a comfortable, clean and safe industry thanks to automated facilities and large-size convenient equipment using high-productivity technologies such as genetic engineering. Korean agriculture must become this kind of comprehensive industry, ceasing to be merely a primary industry category, and extending into the secondary and tertiary industries.

It should not be our goal to continue endless dumping of limited resources on ever-weakening farm businesses. And it should not be our target to maintain an unsustainable agriculture which needs perennial protection against the global tide of trade liberalization which should not be refutable for such a heavily trade-dependent country like Korea.

Therefore, Korean farm businesses must become a rewarding profession for farmers so that they can be hopeful and confident for the future. At the same time, it should become attractive to the younger generation. In order to achieve this goal, we should facilitate farm management innovation in terms of encouraging Korean farmers eventually to adjust to the international market system of free competition.

The second objective is to enable Korean farmers to operate successfully in markets mechanism, confident in their farm businesses which should be more profitable, comfortable and growing in the future. They should become more responsible for their own activities and make decisions, accept results and learn from feedback by themselves.

The third objective is the renaissance of rural Korea in which at least one fourth of the total population could live with balanced income, enough job opportunities, necessary services for daily life and the same

level of opportunities of education, health care and other welfare systems as in urban areas. For this, it is necessary and urgent to create many more non-farm job opportunities in rural areas. Agro-industries like the processing and storage of farm products will be promoted in rural areas. Traditionally manufactured goods in rural areas will be developed to become modernized and profitable products. These activities will be related to accelerating the tertiary industries such as leisure, sports and tourism which attract urban people to visit rural areas quite often. To encourage silver industries and resort development in the traditional countrysides will be another alternative for creating more new jobs as well as improving infrastructure in those areas.

At the same time, the quality of rural life in real terms must become balanced with that of urban people. Otherwise, nobody will intend to remain in rural areas. The most important factor, especially to the Korean people, is the condition of education for their children. It must be improved in terms of opportunity as well as quality, so that rural education will not oblige rural people to move to urban centers only for their children's education. New concepts of rural housing will be introduced for rural people, so that they have access to the amenities of electrification, water supply, sewage systems, and so on, along with a calm and clean environment. Also systems of transportation, telecommunication and health care should be developed in terms of convenience and cost saving for the rural population.

On the basis of these three major objectives, agricultural and rural policies are in the process of reformation. There are two main frames; one is agricultural policy to strengthen competitiveness, and the other is rural policy to improve the quality of rural life.

In order to strengthen the competitiveness of Korean agriculture or farm businesses, five categories of policy measures will be implemented. The first one is to strengthen the farmer's ability to compete with other industries and adjust to internationally open market system. Various programs for future farmers, re-education and training are already underlay.

The second category is strengthening price competitiveness, which is the major weak point of Korean agriculture. There may not be a completely satisfactory way of reducing the costs of agricultural production and marketing in Korea. But even though we realize the

limitation, still we should not give up the efforts of minimizing the costs of production and marketing by all possible means. Saving land and labor costs will be the main targets. Enlargement of farm size, farm operations as large-scale as possible, full mechanization and maximum automation, and introduction of any kind of high productivity technologies will be included in this policy area.

The third category is competitiveness in quality. Korean domestic consumers will be the main target of this effort. The core of this strategy is to secure the confidence of Korean consumers in the quality of domestically produced farm products in terms of taste, freshness and safety. A quality approval system has been recently introduced for this purpose. Free competition will be the best way to improve quality and service, so that all kinds of domestic production and marketing regulations will be eventually removed except those related to quality improvement measures.

The traditional tastes and preferences of Korean consumers can be exploited as Korean producers improve the quality of their products, and make them more attractive to the consumers and as a result, raise profit margins. Although it may not be a great amount, it may be possible to export Korean agricultural products to international markets. Japan will be the nearest and the most likely market. Some fruits and flowers, pork and chicken will be possible export items.

The fourth category is to enlarge the base of farming income. Expanding the size of farm businesses and increasing the value added in farm operations will be the essence of this policy. Various programs of long-term loans for capable farmers have been implemented and a legal basis for allowing more corporate farming will be taken into consideration.

The fifth category is strengthening the bargaining power of farmers in the process of marketing. To encourage farmers' organizations and to facilitate investment in agricultural marketing in rural areas nearer to the farmers will be the major tasks in this policy area.

For the other frame, rural policy, it is necessary to redefine the roles of local governments and the functions of other ministries in the central government. The first priority of all relevant policies must be focusing on the improvement of rural living standards. At least rural people should be treated with the same importance as urban people.

All the investment programs of rural development must be initiated by the local governments and the local people themselves. The assistance and support programs of the central government, including subsidies and loans, will be executed on the basis of these original development plans. Since 1992 it has been up to local governments to set up their own development plans.

In conclusion, I would like to mention the share of agricultural budget which can be classified into two categories. One is income compensatory budget for farmers such as the expenses caused by the government purchase and release program of rice, subsidies for the interests of farm households' debts, and other subsidies for the living expenditures of farm households. The other one is the investment budget such as investment on farmland improvement, agricultural productivity increase, machinery, facilities and equipment for agricultural production and marketing, rural infrastructure and human capital investments.

I must say that because of political reasons, until very recently the first category of income compensatory budget has been too big and has restrained the already limited resources of the government budget for real investment. I would say that was one of the main reasons keeping Korean agricultural and rural sector lagging. This support will no longer be maintained. It should be changed so as to reduce and minimize that part of the compensatory budget which may lead Korean agriculture to a bottomless pit into which valuable resources are dumped. Other than that, all available resources of local and central governments should be mobilized to focus on real investment to improve the competitiveness of Korean farm business and to improve the quality of rural life. And that is the core of policy reform in the agricultural and rural sector.

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