Journal of Rural Development 3 (December 1980): 153-164

MARKETING AND PRICE POLICIES AND PROGRAMS FOR MAJOR FOODS IN KOREA*

HUH, SHIN-HAENG**

Abstract

This paper addresses major agricultural marketing and price policies in Korea. The objectives of these policies are firstly to stabilize prices of agricultural products, secondly to raise farm incomes comparable to the incomes of those who work in non-farm sectors, and thirdly to establish a perfect market for agricultural produces. To achieve these objectives the government has initiated a number of measures including purchase programs, production and supply arrangements, mortgage loan, price controls, export promotion and import restrictions, producer subsidies, and disaster payments. By reviewing the policy instruments one indicates that many of the detailed implementary programs papear to be poor primarily because of the lack of scientific knowledge and financial support. More importantly, what Korea needs are trust and responsibility for its programs.

I. Introduction

The Korean economy has grown at the annual rate of more than 10 percent in the past decade. The primary engine for this rapid economic growth has been the export-oriented manufacturing sector. However, the growth of the agricultural sector has lagged far behind the non-agricultural sector, resulting in a gradual decline in the share of agriculture in GNP to less than 20 percent. Differences in growth rates between farm and nonfarm sectors have resulted in a number of adjustment pressures emerging in agriculture. Areas which need anjustment include both factor and product markets as well as the structure of agriculture. In addition, marketing and price policy is also becoming an area in which adjustment is definitely necessary. Th eprimary purpose of this paper is to review present agricultural marketing and price policies with the ceim of better understanding the need for them adjustment to improve the agricultural sector in Korea.

* An earlier version of this paper was presented at the international seminar on "Toward Efficient Food Marketing Systems in Asian Economies," Seoul, Korea, July 15-19, 1980

** Senior Fellow, Korea Rural Economics Institute.

II. Objective of Policies

It is well known that agriculture has different characteristics from the non-agricultural sector. A large part of agricultural production depends heavily upon such natural conditions as type of soil, weather climate, diseases and pests. Variations in these conditions may cause production shortfalls and surpluses, which can give rise to severe price fluctuations which in turn lead to substantial variations in income for farmers and in expenditure for consumers. Thus, the main objective of price policy is to stabilize agricultural product prices for both producers and consumers[1].

The rapid growth and industrialization of the Korean economy in the past decade or two have changed consumption patterns of foodstuffs, and this has necessitated changes in the traditional forms of agriculture. One of the most striking problems in changing the agricultural sector is that agriculture has difficulty in adapting rapidly to changing economic conditions. The difficulty in adaptation arises because of immobility of resources, a random combination of natural resources, imbalanced surplus productive capacity, etc.[1]. An essential element in this process of adaptation is the extent to which the incomes of those working in agriculture tend to lag behind the incomes of those working in other sectors. To keep maintaining income parity between agricultural and non-agricultural sectors, among other things, price policy is most preferred at least in the short-run. Therefore, an important focus of agricultural price policy is to raise farm incomes to make them comparable to the incomes of those who work in non-farm sectors.

Most agricultural product rpices are determined in the market. Whether these prices are efficiently established is under question, especially in markets with imperfection. In seasonaly produced products where karket information is not perfect, grading systems are poor and producers' bargaining power is weak, middlemen including merchants take advantages of unbalanced demand and supply and bring about wider price fluctuations which in turn lead farm income fluctuations. To effectively achieve the two goals of price stabilization and income parity between farm and nonfarm sectors, marketing policy should aim at creating a perfect market.

III. Policy Instruments

Since 1961, the government has attempted to maintain agricultural product prices and farm incomes at levels high enough for continued efficient operation. Currently provailing marketing and price policies are largely embodied in the provisions of the Agricultural Price Stabilization

Act of 1961 (Law 636) revised once in 1963, the Grain Management Act of 1963 (Law 1386) revised five times, and the Agricultural and Fishery Product Marketing and Price Stabilization Act of 1976(Law 2962) revised twice. In these Acts the government has initiated a number of measures which include purchase programs, production and supply arrangements, mortgage loans, price controls, export promotion and import restrictions, However, most of the programs cannot be implemented unless the Minister of Agriculture and Fisheries establishes a detailed implementary program and gets it approved by the President of the country after it has been screened in the Cabinet Council[7].

1. *Purchase Programs*

Purchases of agricultural and fishery products for price stabilization as well as price support in Korea are made by two different laws: the Grain Management Act and Agricultural Price Stabilization Acts. Purchases of food grain have become a key concern of the Grain Management Act, while purchases of other agricultural and fishery products have been embodied in both the Agricultural Price Stabilization Act and the Agricultural and Fishery Product Marketing and Price Stabilization Act. The main difference between the two purchase programs is that the purpose of purchasing food grain is to ensure food security and the stabilization of the national economy by maintaining an optimum price through supply-demand arrangements, while the purpose of purchasing other products is simply to stabilize market prices (7).

According to the Grain Management Act, the Minister of Agriculture and Fisheries is supposed to balance the annual supply of and demand for food grain to be handled by the government and to determine the purchase price and quantity, among others things. The delailed annual implementary program is finalized by the president of the country after the plan is screened in the Cabient Council. Based on the plan, the Minister of Agriculture and Fisheries should announce details of the purchasing price and quantity, the periods and places of purchasing and other related procedures.

The grain purchase program covers rice, barely, wheat, rye, corn, millet, soybeans, and other food grains. However, the major purchasing items have been rice and barely, as shown in Table 1. In 1963, the government purchased only 6 percent of rice production and no barely. Since then, the government has steadily increased the share of production of both rice and barley it has purchased. In 1979, for example, the government managed to purchase 23.4 percent of rice productiin and 37.1 percent of barley production.

The purchase price set by the government is primarily based on the production cost as indicated by trends in wholesale, retail, and farm sup-

TABLE 1 QUANTITY OF MAJOR FOOD GRAINS PRODUCED AND PURCHASED, KOREA, 1970–79.

(M/T)

Commodity		1970	1975	1979
Rice	Production	3,939,264	4,669,056	5,564,880
	Purchase	350,784	789,552	1,300,608
	Rate of Purchase (%)	8.9	16.9	23.4
Barley	Production	1,141,272	1,220,274	1,081,971
	Purchase	128,106	372,834	401,544
	Rate of Purchase (%)	11.2	30.6	37.1
Wheat	Production	232,848	103,194	44,688
	Purchase	29,106	1,176	18,816
	Rate of Purchase (%)	12.5	1.1	42.1
Soybean	Production	232.065	310,500	261,900
	Purchase	2,835	6,345	4,590
	Rate of Purchase (%)	1.2	2.0	1.8
Corn	Production	67,770	54,135	148,905
	Purchase	11,745	5,940	55,890
	Rate of Purchase (%)	17.3	11.0	37.5

Source: Ministry of Agriculture and Fisheries, *Year Book of Agriculture and Forestry Statistics*, 1970–80.

ply prices. The government also considers general economic conditions to ensure that farmers earn an income comparable to the income level in nonfarm sectors. The average annual increases in the purchase prices of rice and barley during 1962–79 were 20 percent and 19 percent respectively. The purchase price set for 1979 crops was 22 percent higher than the previous year's price. In general, government purchase prices of rice have been higher than production costs and have been increasing relative to the average rice price received by farmers in recent years. On the other handl purchase prices of barley have been lower than production costs except for some years [3].

The fund for the purchasing program for food grains is made available based on the Grain Management Fund Act of 1970 (Law 2237). The sources of fund include the central bank, a special grain fund, a grain bond, and the difference between selling prices and prices paid for imported grain. In 1978, 60 percent of the total fund (384 billion won) was drawn from the grain bond at an interest rate of 20 percent per annum and the remaining 40 percent came from the central bank at an interest rate of 2 percent per annum. The fund is spent for payment to farmers, for the handling, processing, packaging, transporting and storing of purchased grain and for interest resulting from the money borrowed for the program [3, 5].

According to the price stabilization laws stated alove, the Minister of Agriculture and Fisheries can decide a detailed implementary purchase program whenever it is necessary to have one in order to stabilize market prices. How this price stabilizing program becomes effective for actual purchasing in a certain period of time depends on the market situation and on decisions to be made by the Minister. Therefore, it can be called a temporary purchase program. There are two kinds of temporary purchase programs: a stockpiling purchase and a surplus purchase. The primary purpose of the stockpiling purchase program is to reduce price fluctuations resulting from a supply shortage in the off-season. On the other hand, the major purpose of the surplus purchase program is to absorb the excess supply from the market so that the price received by producers can rise. If the stockpiling purchase program is carried out in the domestic market alone such that it purchases a certain amount of surplus after harvesting time and releases it during the off-season, then this program may have the same effect as the surplus purches program. In this situation it is very difficult to distinguish a basic difference between both programs. However, if there is no surplus in domestic production, then a necessary amount of agricultural and fishery products can be imported for the stockpiling program but not for the surplus purchase program. In addition, the stockpiling purchase program can be applied to seasonally produced products even though there is no excess supply on an annual base.

Temporary purchase programs cover such products as red pepper, onions, garlic, sesame seeds, rape, peanuts, beef, pork, chicken, dried laver, dried cuttle-fish, dried pollack, canned saury, and the like. In 1979, the government purchased 827 M/T of red pepper, 2,420 M/T garlic, 1,844 M/T of onions, 5.711 M/T of pork, 527 thousand chicken, and 442 thousand sok of dried laver. For the purpose of stockpiling the government also imported 21,062 M/T or red pepper, 5,568 M/T of gralic, 4,504 M/T of peanuts, 7,770 M/T of sesame seeds, and 31,747 M/T of beef in 1979. Including other purchased items the government provided 16,763 million won for domestic purchases and 42,398 million won for imports for stockpiling, plus 20,320 million won for general purchasing in 1979 [5].

Policy dedisions on whether the government should intervene in those product markets are made by the Minister. MAF generally sets a purchase price, the quantity to be purchased, standardization and grading, the purchasing period, and other procedures. However, decisions on detailed procedures can be transferred to quasi-government organizations by the order of the Minister. The action programs are usually implemented by different institutes depending on commodities. The Livestock Development Corporation (LIDECOR), a quasi-government organization, implements the purchase programs for livestock products while the National Agricultural Cooperatives Federation (NACF) and the Agriculture and Fisheries Development Corporation (AFDC), also quasi-government organizations, handle the programs for vegetable products and the like. The National Federation of Fisheries Cooperatives is supposed to implement the programs for dried fishes and other sea products under question.

Sources of funds for the temporary purchase programs differ depending upon commodities. For example, the fund for the purchase of livestock products is drawn from the Livestock Development Fund which is mainly accumulated by the difference between a release price of and the price paid for imported beef. The fund for handling other agricultural and fishery products is provided from the Agricultural Fishery Price Stabilization Fund established by law in August 1966.

Some problems have emerged with these purchasing programs, however. One of the important problems appears to be the lack of funds necessary for purchasing designated products from producers and/or their organizations. A major reason for the lack of purchasing funds includes a small scale of the price stabilization funds available for the programs and the difficulty in borrowing money from public banks. This lack of funds limits the effectiveness of purchase programs. A second and related problam is the deficiency accumulation. The policy decision maker decides to intervene in agricultural and fishery product markets when there exists on surplus over domestic needs. Thus, the products that are purchased and stored may not be needed for release into an ongoing market in the short-run. As a result, some perish or have to be sold at prices much lower than the cost of purchasing and storing the purchased products. A third problem lies in the inefficient operation of and the restrictions on temporary purchase. The government usually delays making any specific purchase until an agricultural or fishery product market is facing severely depressed prices. If government purchases start when the market price is extremely low, it then becomes difficult to raise the market price above this low equilibrium level without making huge and hence costly purchases. Also, the government usually purchases farm products under the temporary purchase program from selected farmers at a higher level than the market price. As a result, the majority of farmers have not benefited directly from the programs and dual prices have tended to operate in a single commodity market.

In order to make the purchase programs more efficient so that the price stabilization of agricultural and fishery products can be maintained, the government should collect enough funds for the purchase programs to work effectively, encourage the development of processing industries to the extent that they can utilize efficiently the quantities purchased by the public agencies, and run an open market operation based on reasonably accurate plan established in advance.

2. *Production and Supply Arrangements*

Production and supply arrangements are used to balance the demand for and supply of agricultural products in the market for the purpose of maintaining an optimum price level. This policy has been applicable since 1977 as a result of the Agricultural and Fishery Marketing Price Stabilization Act of 1976 (Law 2962) which has been revised twice. This law specifies measures to either promote or discourage the rate of production and to arrange the quantity of supply through wholesale markets. If there appears an excess demand which pushes market prices up, then the Minister of Agriculture and Fisheries can promote the level of production by providing loans, etc. to farmers for production in designated production areas or to designated farmers in producing areas. In addition, the government can arrange production contracts between processors (or exporters) and farmers (7).

The primary purpose of this production and supply arrangement is to adjust supply to the size of demand in the market. It may be too late for the gevernment to manipulate the supply side once supplies have been marketed, so the government has attempted to stabilize the level of production as well as the flow of supply into the market. In addition to production loans (for examples, 960 million won in 1978 and 900 million won in 1979 for the promotion of hog breeding), the government also provided 2,189 million won in 1977, 14,798 million won in 1978, and 13,268 million won in 1979 for supply arrangement programs.

The difficulty in the production arrangement program is that agricultural production takes time, resulting in a time lag between plans and actual production. Because of this time lag it becomes hard for a public agency to arrange a production level suitable for stabilizing supply in the market. Coupled with bureaucratic delay, the government has been less than successful in achieving price stabilization through the production arrangement program. Instead, the promotion of certain production for the purpose of price stabilization by the government has at times been the major price destabilizing factor in the market and has reduced the efficiency of resource allocation in the agricultural sector. However, supply arrangement has been quite effective in extending and stabilizing the flow of supply into the market and thereby reducing price fluctuations in the short-run. Therefore, as far as price stabilization is concerned, the supply arrangement program is preferable to the production arrangement program.

According to law, the government is supposed to compensate the loss if any to farmers who are designated to produce products under the program. In addition, the government should purchase the products produced by these designated farmers first in cases of excess supply. However, the implementation of these two supplementary programs have not been satisfactory and have become a source of complaints made by farmers.

3. *Mortgage Loan*

Loans are available from a public agency designated by the government. With these loans, the farmer pledges specific amounts of a commodity as collateral, and the amount that can be borrowed is equal to the set price times the quantity put under loan. Farmers may repay the loan plus interest and storage charges and thus regain possession of the commodity. If the farmers choose not to repay and instead sell their products to the government, then a designated agency has to purchase the commodity at the price equal to the total repayment. This program applied formerly to major food grains but in recent years it has been practiced rarely by the government [7].

4. *Price Controls*

The prices of food grains can be controlled by the government. This price control is embodied in the Grain Management Act of 1963. The objective of this control is to stabilize market prices. If any direct price control is necessary, then the Minister of Agriculture and Fisheries in consultation with the Minister of Economic Planning can freeze or change selling prices. The release prices of purchased grains have ranged from 72 to 78 percent of actual costs for rice and 45 to 66 percent of actual costs for barley during 1975–79, as shown in Table 2. The difference between the actual cost and the release price is paid from the Grain Manazement Fund. However, the majority of the dificiency has been accumulated every year and so has become a burden to the society. This has contributed to higher inflation because a major source of funds includes borrowed money printed by the central bank. In 1977, the total deficiency resulting from the dual pricing schemes was 63,100 million won which contributed 0.61 percentage points to the rate of inflation of 6.1 percent due to the necessary increase in the supply of money [6].

The government has long practiced direct control of beef and pork prices at the retail level without supply and demand management. The main reason for this direct price control is to overcome perceived imperfections in the meat market. For example, meat retailers extablished a price cartel which had been operating for 13 years. Also, market information has not been perfect and the grading system works poorly. All these inefficient marketing functions have induced the government to control the price of major meats at the retail level. However, direct price control by the government has been at times a major price destabilizing factor in the meat market. It has also distorted resource allocation in the livestock sector. This was changed in January 1980 to a linked price system which

TABLE 2 Actual Cost and Release Price of Rice and Barley in Korea, 1975–79

Commodity	Year	Actual Cost Purchase Price(A)	Handling Cost	Total Cost(B)	Release Price (C)	C/A	C/B
		won				%	%
Rice	1975	15,760	1,488	17,248	13,000	82.5	75.4
(80 kg)	1976	19,500	1,996	21,496	16,730	85.8	77.8
	1977	23,200	2,424	25,624	19,500	84.1	76.1
	1978	26,260	3,372	29,632	22,420	85.4	75.7
	1979	30,000	5,088	35,088	26,500	83.3	75.5
Barley	1975	9,091	1,412	10,503	6,900	75.9	65.7
(75.5kg)	1976	11,100	1,446	12,546	8,320	75.0	66.3
	1977	13,000	1,749	14,749	9,200	70.8	62.4
	1978	15,500	2,462	17,962	10,120	65.3	56.3
	1979	18,500	4,068	22,568	10,120	54.7	44.8

[a] Rice Year.
Source: Food Grain Policy Bureau, Ministry of Agriculture and Fisheries, Seoul, Korea.

allows the retail price of beef and pork to move according to wholesale prices.

The price of milk has been controlled since 1973. The price fixing for dairy products is embodied in the Dairy Development Act of 1967. According to this law, the Minister of Agriculture and Fisheries can set an optimum price on fresh milk through the Dairy Council established under the Minister. The price of raw milk at the farm level has been fixed at 266 won per Kg since 2 February 1980 after being raised ten times from 67.5 won per Kg in 1973. Nowadays, this price is considered too high compared with the international price of milk and the consumer's purchasing power.

5. *Export Promotion and Import Restriction*

One of the most important export-support programs is in the form of low-interest loans. The main purpose of cheap loans is to promote exports by providing a financial advantage to the export-oriented producer. The major source of loans for the exportation of agricultural products is the export preparation loan which accounts for less than one tenth of total short-term loans. This export preparation loan has been provided since 1969 for producing, assembling, and storing agricultural and fishery products. The commodities covered by the loan include sweet rice for making cookies, silk yarn, ginseng, mushroom, sea-weeds, cuttle-fish, oyster, canned oyster, chestnut, and the like. Loans can be provided for up to 70 percent of the needed cost at an annual interest rate of 9 percent. In addition, the government can provide a subsidy to agricultural exporters who lose because of a price difference between the domestic and international markets [1].

The importation of most agricultural products is restricted unless the government permits them. If there appears to be a production short fall, the government may import directly or give approval to a company or a person who applies for importation of it. The Minister of Commerce and Industry periodically announces the quantity, the currency of transaction, standards the countries to be dealt with, etc., for those commodities that need to be approved or licenced. The agricultural commodities that were restricted for importation and announced in the early half of 1978 included beef and dairy cattle, hogs, sheep, chicken, ducks, turkeys, deer, honey-bees, milk and cream, butter, cheege, natural honey, garlic, onions, fresh vegetables, tea, red pepper, oil seeds, sesame seeds, meat, fresh fish, bananas, pineapple, dried fruits, oranges, grape fruits, apples, pears, straw berries, and the like [4]. However, there exist special laws to regulate agricultural and fishery cooperatives, foreign loans, grain management, sericultural development, feed grain control, and so on that allow the Minister of Agriculture and Fisheries to also control both exportation and importation of major grains and to ask a quasi-government organization to handle the importation of feed grains and the exportation of sericultural products. The commodity items to be dealt with under these special laws are supposed to be announced regularly twice a year by the Minister of Agriculture and Fisheries. The Minister can set the price and quantity of imported commodities to be sold in the market.

6. *Other Programs*

Producer subsidies were given to livestock farmers who had a new-born calf or who marketed cattle through farm cooperatives for slaughtering. For example, during the year beginning 1 June 1977, the government made a direct payment of 5,000 won per head of new-born calf to farmers, which amounted to 2,400 million won for 485 thousand calves. The government changed the payment from 5,000 won to 8,000 won per head only for female calves effective June 1, 1978, and revised it again to 6,000 won without sex discrimination effective from Octover 1, 1978. The program was stopped in September 1979. The reason for this direct payment to farmers was to give them an incentive to produce more calves. Another direct payment for cattle marketed for slaughter was first introduced in March 5, 1979. Payments varied initially depending on live and carcass weight and breed. However, the scheme was subsquently simplified and provides a flat 30,000 won per head for any cattle being marketed without weight and breed discrimination. The reason behind this direct payment for slaughtering cattle was that in 1978 and 1979 the government was reluctant to raise the consumer price for beef but wanted to boost returns to livestock producers. This payment program was terminated in February 1980.

Disaster payments are made when natural disasters cause a severe reduction of production. In 1979, the government made various payments for rice farmers who planted new varieties introduced by the government and had a reduction of production due to disease (neck blast). The farmers whose loss was larger than 20.1 percent of normal production received a tax exemption on irrigation, and credit for one year for purchasing food grain released by the government. In addition, the farmers whose loss was larger than 50.1 percent of normal received a one year tuition exemption for their children who were then high school students and an interest subsidy on production loans for which repayment was postponed a further year. The farmers whose loss was larger than 70.1 percent of normal received additional food grain equivalent to 60 percent of damage based on an individual lot. The total amount made for disaster payments was equivalent to 36,493 million won. In general the government may lend food grain to farmers who do not have enough harvest even for their family consumption due to natural disasters. The farmers who receive food grain from the government are supposed to return the same amount in kind back to the government within a year. If a farmer wants to pay back in cash to the government he may do so under the Minister's approval. In the rice year of 1980, the government is very likely going to lend food grain to farmers whose crops were severely damaged due to exceptionally cool weather.

The Grain Management Act prohibits any monopoly or monopsony activities in the food grain market. This is very important. There used to be merchants who purchased large amounts of rice immediately after harvest in order to sell at much higher prices in the off-season. As the government increased the share of rice production it purchased and hence was able to release onto the market, this behaviour by middlemen disappeared. However, one can not rule out the possibility of it reappearing, especially during off-seasons.

IV. Concluding Remarks

Laws and regulations affecting the marketing and price policies in Korea may be ideological. But many of the detailed implementary programs appear to be poor primarily becaused of the lack of scientific knowledge and financial support. More importantly, the majority of farmers tend not to trust the government in relation to agricultural marketing and price policies because the government has so frequently changed programs and has not taken at times full responsibility for its programs. Sometimes the government's intervention in agricultural markets has been a major destabilizing factor and has reduced the efficiency of resource allocation in the agricultural sector. This does not imply that agricultural marketing and price policies by the government are not necessary. Most food grains, fruits and vegetables are seasonally produced, and hence need to be evenly distributed at a fair price for both producers and consumers.

What Korea needs in the field of agricultural marketing and price policy is a scientific program which is permanently set and continues to work automatically from year to year. Then strong responsibility for programs should be given to the government so that all the participants in programs can benefit. Finally, the government should not fail in making a gradual adjustement, instead a sudden change, to a new situation.

REFERENCES

[1] EEC, *The Agricultural Policy of the European Community,* European Documentation Periodical 2179.

[2] Kim, Kwang-Suk and Larry E. Westphal, 1976, *Foreign Exchange and Trade Policy in Korea,* Korea Development Institute, (in Korean).

[3] Ministry of Agriculture and Fisheries, *Year Book of Agriculture and Forestry Statistics,* 1964–80 (in Korean)

[4] Ministry of Commerce and Industry, *Periodic Announecment on Trade Items,* 1968–79, (in Korean)

[5] National Agricultural Cooperatives Federation, *Monthly Review,* January 1970–June 1980. (in Korean).

[6] The Bank of Korea, *Monthly Review,* January 1979 (in Korean).

[7] The Legislative Administration Agency, *The Book of Law,* 1980 (in Korean).