# EFFICIENCY OF MARKETING SUPPORTING FUNCTIONS

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#### I. Introduction

The marketing functions are divided into three categories; physical function such as transportation, storage, processing and physical handling; management function such as buying and selling, store operation facilities maintenance, financing and cleaning and janitoring; supporting or facilitating function such as market information service, standardization, measurement credit, risk bearing and institutional arrangement.

The facilitating function is performed to support an increase in efficiency of marketing system. The marketing system includes technical system, power system and pricing or communication system.<sup>1</sup> The technical or input—output system is the obvious physical backbone of marketing system. The technical relationships provide the interstage linkages throughout the system. Efficiency of technical relationship in marketing system is related to productive efficiency including scale, and load factors of marketing facilities and adjustment of technical progress.

The marketing power system is characterized as power struggles in commodity exchange. The economic market structure determines the market power. Economic structure has components of size and number of firms or dealers, product homogeneity, perishability of product, degree of diversification in product lines, raw material needs and degree of vertical and horizontal integrations.

The price mechanism has been identified as an important means of communication in marketing system. The pricing efficiency of marketing system is evaluated by the degree of competition among marketing participants including farmers, consumers and middlemen, transportation firm, storage firm and each other.

The marketing supporting function should be evaluated and enhanced to promote the efficiency of whole marketing system through smoothing and encouraging marketing functions performed and through providing motivation for

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Wayne Purcell, Agricultural Marketing: System, Coordination, Cash and Futures Prices, Reston Publishing Co. Inc., 1979.

marketing participants to adopt new technology and to invest new facilities and their operation.

# II. Marketing Information System

#### 1. Present Situation

## A. Survey Systems

The survey of price systems of the agricultural-fishery products aims to establish the price index on the one hand and to obtain the marketing information on the other.

The Economic Planning Board(EPB), the Bank of Korea(BOK) and the National Agricural Cooperatives Federation(NACF) undertake the survey of the market prices two or three times per a month, to make the price indexes and to release price data on some major agricultural-fishery products. On the other hand, the Ministry of Agriculture, Forestry and Fisheries(MAFF), NACF, the National Livestock Cooperatives Federation(NLCF), the National Federation of Fisheries Cooperatives(NFFC), the Agriculture and Fisheries Marketing Coporation(AFMC) undertake the price survey to obtain the marketing information on the agricultural-fishery products, along with the Korea Chamber of Commerce and Industry(KCCI) and some other organizations. As for the price survey, the MAFF, NACF, NLCF and NFFC are in charge of the wholesale prices, and the AFMC in charge of the retail prices, and the KCCI in charge of the consumer price in the Seoul area(Table 1).

#### B. Collection and Dissemination System

The marketing informations of agricultural and fishery products are collected and distributed by the MAFF, NACF, NLCF, NFFC, AFMC, KCCI and other private institutions. The NACF reports the wholesale prices and quantities marketed in the cities, and the prices at the producing area, to the city/county branch office of Statistics Division of MAFF, through the NACF's marketing center, special cooperatives, and NACF's county branches either by telephone or letter. The data are fed into the main computer at the MAFF's Market News Division through the Provincial Office of Statistics Division of MAFF, processed for analyses and dissemination. The dissemination takes place in two different ways: generalized dissemination and systematic dissemination.

The generalized dissemination is that the data processed in the MAFF are delivered to the public or end-users through television /radio broadcasting, periodicals and newspapers, and the automatic-telephone-answering device installed at the NACF's Market News Center. The systematic dissemination is the way of distributing the information in a reverse order of collecting data such that NACF's branches in cities and counties, and primary cooperatives

TABLE 1 The Price Survey of the Agricultural-Fishery Products

Section	Institutions	Items	Region	Period	Duration	Quality standard	Data application
	NACF(farm price)	80 items	85 counties	Twice/month	Whole year	Medium grade	To make price index
				(around the	(around	_	received by farmes.
				15th)	harvest season		
	NACF(producing-	19 //	95 5-day	Every 5 days		1st & 2nd grades	Marketing informa-
	area price)		markets	(everyday		(fruits;1st, 2nd,	tion
	]			for rice)		3rd, grades)	
	MAFF(*)	6 /	rice;18places	,			
	1 ' '		bean, 8 //	"	"	1st & 2nd grades	
			pear; 5 //				
			others; 6 #				
Price at	NLCF(*)	2 "	80 5-day	,,	Whole year		
producing			markets				
area		26 "	8 regions				
	NFFC(#)	26 "	23 consign-	"	,		
	` ′		ment markets				
			at port				
		26 "	5 inland	,	,,	big, medium & small	
			cooperative			size	
			marketing				
			centers				
	BOK	41 items	15 cities	Everyday	Whole year	Medium grade	Wholesale price index
	NACF	41 //	10 //	, ,	/ (fruits;	1st & 2nd grades	
					harvest	(fruits; 1st, 2nd,	
			]		season)	3rd grades)	
Wholesale	MAFF	4 "	19 %	, ,	Whole year	1st & 2nd grades	Marketing information
price	AFMC	46 //	15 %	,	,,,	1st & 2nd grades(*)	,
•	NLCF	4 //	7 wholesale	"	"		"
			markets				
	EPB(consumer	62 //	9 cities	Every 10days	Whole year	Based on 2nd grade	Consumer price index
	price)			(3times/month)			
Retail	AFMC	28 "	"	"	"	,	Marketing information
price	NACF(price	199 //	85 counties	twice/month	"	,	Price index for farmers
•	offered to		(				
	farmers)		1	1			ļ

Source: Sung, Bai-Yung, et al., National Marketing Master Plan Study, KREI, 1984.

provide the necessary information to the public and their members.

The NLCF collects the price data of livestocks at the producing areas and the wholesale price at the city level, and distributes them in the same way as the NACF does.

The NFFC collects and distributes the data on the marketing of fishery products in the same way as the NACF does. In addition to this, NFFC does the same work by using the radio stations. That is, the marketing data formed at the consignment marketing centers at port are fed into the MAFF computer and at the same time are distributed to the fishing boats operating at the sea through the 49 radio stations. The data processed at the MAFF computer are disseminated through the same way as both the NACF and NLCF do. The marketing data formed at the inland cooperative marketing centers are fed into the MAFF computer via NFFC and disseminated in the same way as the data formed at the consignment marketing centers at port.

The AFMC also collects the price data, wholesale and retail prices, in the same way as NACF and NLCF do, but AFMC does not have its own distribution system(Figure 1).

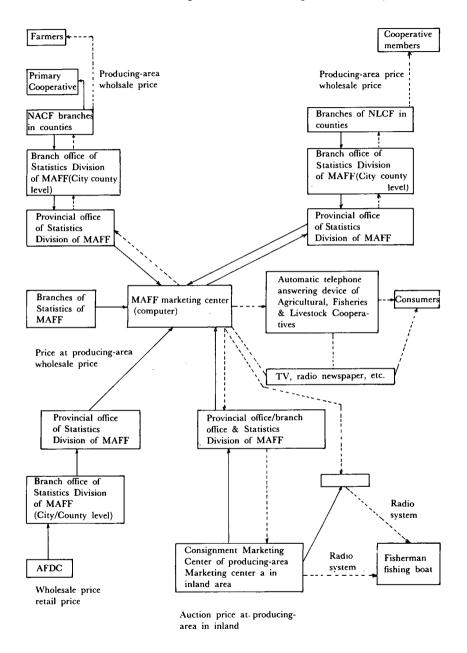
Agricultural products are quite different from the industrial goods in terms of production process, items, color, flavour and taste, for example, and therefore it is quite difficult to establish common criteria with which all parties can be satisfied. But in view of the importance of standardization, a general set of criteria that can satisfy both producers and consumers ought to be found. In this respect, some standards now being utilized by NACF could be used as valuable starting points.

# 2. Evaluation of Existing Information Systems

Problems in collecting/disseminating the marketing information for the agricultural-fishery products can be summarized as follows:

- 1) Marketing information for the agricultural-fishery products at present, is collected and distributed by individual institutions in accordance with their own procedures and needs. Even though the survey on producing area prices, wholesale prices and retail prices is carried out, the lack of standard criteria for sampling, size of product, times, places, and items to survey, makes comparison among prices surveyed almost impossible, and thus the value of the data may loose their credibility.
- 2) As far as wholesale prices are concerned, MAFF, NACF, AFMC, NLCF and BOK carry out the surveys in accordance with their own needs, although, in most cases, they choose the same products for the same purposes. In particular, both NACF and AFMC choose vegetables, grains and fruits as their survey items except in the case of survey of wholesale prices of fishery porducts by AFMC.
- 3) The lack of standard criteria for classification, packing and trading units makes the maintenance of objectivity and validity of data difficult

FIGURE 1 Network of Marketing Information of the Agricultural-Fishery Products



Source: Sung, Bai-Yung, et al., National Marketing Master Plan Study, KREI, 1984.

and price comparison among products almost impossible.

- 4) Presently existing price index data often fail to cover the average price index nationwide. In consideration of the undeniable role that the average price index plays on obtaining information for marketing as well as marketing margin, national income statistics, agricultural income structure, a complete price index information should be established.
- 5) A complete data on the marketing volume will no doubt facilitate to set up accurate price structure, marketing information and other related concerns. Unfortunately, however, currently existing information on marketing fails to provide an exact assessment on the volume of marketing.

## 3. Guidelines for the Imporved System

## A. Establishment of Integrated Marketing Information Network System

To establish the integrated marketing information network systems is to unify the existing system that links MAFF, NACF, AFMC, NLCF into one unified system led by MAFF marketing information center(National Agriculture Marketing Information System).

Container/Grade Standardization Division is in charge of establishing and applying the standard and classification rules while Market News Division collects market information, according to which it sets up policies on item-by-item basis and carries them out.

Economic Statistics Division of Statistical Reporting Service Division reveals statistics on item-by-item basis, while Crop Reporting Division analyzes cultivated land area, production, storage capacity, inventories, and forecasts future outlook on item-by-item basis(Figure 2). In particular, it provides information on production of major crops and their marketing situation as promotly as possible. In order to carry out these functions, necessary facilities for marketing information and its programming ought to be developed.

Overall survey methods are to be improved, in particular, in such areas as sampling mode, survey items and grades, and appropriate time for the survey should be redeveloped. Price information including price indexes should comprise of average, maximum, minimum prices on national, provincial and city basis. The information on average price provides no more than overall price structure and fails to inform the consumers of exact price margins. Therefore, maximum and minimum prices on the basis of items, grades, places and period are to be published.

## B. Diversification of Data Processing Modes

Every data processed in the marketing information center must be disseminated as promptly as possible at a low cost whenever requested by users. The information network system must help the exchange of information between users involved with marketing. Information dissemination through mass media such

MAFF NAMIS CGS MN EDPS SRS NFFCIS FFVMB FFVMB ESC CRD GP GPB FFVMB CE LS-MT LS-MT GP CCSH M-SC M-SCB LS-MT F-OR PP PPB M-SC RTLB PP Advisory/ Evaluation Boards

FIGURE 2 Organization Chart of National Marketing Information Service(NAMIS)

#### ABBREVIATIONS

MAFF - Ministry of Agriculture, Forestry and Fisheries

NAMIS-National Agriculture Marketing Information System

EDPS - Electronic Data Processing System

CGS - Container/Grade Standardization Division

MND - Market News Division

SRS - Statistical Reporting Service Division

NFFCIS - National Federation of Fisheries Cooperatives Information System

FFVMB - Fresh Fruits/Vegetables/Melons/Berries Branch

GP-Grain Products Branch

LSMT - Livestock/Meat Branch

MSC - Miscellaneous and Speciality Crops Branch

PP - Processed Products Branch

RTL - Retail Branch

## ABBREVIATIONS

ESD - Economic Statistics Division

CRB - Crop Reporting Board

CE-Crop Estimates Branch

CCSH-Common and Cold Storage Holding Branch

FOR - Forecast/Outlook Reports Branch

as state-run TV should be greatly promoted.

## C. Reinforcement of Information Education

It would be desirable to provide those involved in the marketing business with general education on information, computer, sampling survey; and the users of information with how to use information dissemination systems, how to analyze and utilize the acquired information.

# III. Standardization, Grading and Packaging

#### 1. Present Situation

There are many difficulties in the standardization and grading of the agricultural and fishery products because these products are easily perishable and not homogeneous in their form and quality. However, as the standardization and grading of the agricultural and fishery products assist in eliminating the inefficiency of the market activity, help reduce marketing costs, bring the greater efficiency in pricing, and increase the consumers awareness of information about goods, the need for such standardization and grading becomes increasingly important. Standardization and grading measures in the marketing stages of each product are quite different (Table 2).

At present 67% of the apples, 54% of the pears, 69% of the dried anchovies, 66% of the dried yellow corvina, 99% of dried laver, 100% of salted shrimp are released by the standardized trading units. But other items are released by the standardized trading units at a very low level.

The government has encouraged the standardization since 1983. And it has urged the use of standardized trading units for 37 products for which the government established and announced standardized units in the first half of 1984. In the second half 1984 it has standardized another nine products including grains, turning the varied and complex units into newly fixed ones. In 1985 it has set experimental standardized units considering current units. And from 1986 it strongly pursues a standardization policy for turning nationally standardized units for agricultural and fishery products into low.

## 2. Economy of Standardization, Grading and Packaging

Standardization helps the consumer understand trading units of goods, and handle goods more easily. By dividing goods according to quality, the grading custom emphasizing the homogeneity of a unit helps the consumer better understand the various grades in quality of goods. Standardized packaging divides goods into easily marketable units improving the efficiency in marketing, and preventing the goods from being damaged in the process. Standardization, grading and packaging complement one another and they have to be achieved simultaneously. The followings are their economic interrelationships.

Criteria Grading Package unit Packing material Division Vegetable: straw, Size, shape, Vegetable:2-3 Vegetable: Vegetable spice, fruit: no fixed unit paper (markets at the procolour, freshness, ducing area) kind 2-5 spice, fruit: Spice:p.p fixed unit Fruit: wooden box. hardboard box plastic, bamboo Similar to those of High, middle, low Vegetable Vegetable: no package markets at pro- Special high, (retail market) ducing area. Pro- middle, low Spice, fruit: package ducing area is an important factor in deciding level of the product. Fish (markets at the pro-Size, freshness High, middle, low Differs according Wooden box, yam sac, plastic, PVC, dryness to the kind ducing area) (retail market) etc. Dried fish (markets at the pro- Size, freshness, Differs according Differs accroding to the kind to the kind drvness ducing area) (retail market) High, middle, low Cattle Body shape, Various (market at the proheight, horn, fatducing area) ness, health (market at the pro- Quality of meat 4 levels 12 parts ducing area) (markets at the pro- Weight, time of 5 levels production, kind ducing area) (retail markets)

TABLE 2 Current Situation of Standardization and Grading

Source: Sung, Bai-Yung, et al., ibid.

cryness, colour

Grains

1) They enable easy handling of the goods so that the goods can be transported and stored in mixed lots to reduce the cost of handling, transportation and storage.

Kind, thickness, High, middle, low 10kg, 20kg, 40kg p.p., straw

- 2) As each standardized units of consistant quality, merchant and consumer can carry out their transaction on the basis of product model, name and sample, eliminating the inconveniences of item by item inspection of quality, thus reducing the time and cost of the transaction.
- 3) Through the raise of effectiveness of marketing information, we can get the precision in pricing forecasting, and reduce risks in the commodity trading. Also it can make it possible to practice the futures market. For this reason especially, the standardization and grading must be achieved first in order to improve the effectiveness of the marketing information.
- 4) They prevent physical damage and reduce deterioration in quality in

marketing. And they increase the benefit to the consumer by guaranteeing a fair price through maintaining a consistent quality. In spite of the benefits of standardization, grading and packaging mentioned above, efforts to achieve them often don't bear fruit because some expense and continuous attention are required in their enforcement. In order to expand standardized goods, inspectors to check the quality of the goods and training for the inspectors are needed.

## 3. Policy Direction for the Standardization, Grading and Packaging

Producers, marketers, consumers and the government have to work together for the early settlement of standardization, grading and packaging issues. Here are what they must do.

- 1) Primary cooperatives at the major producing areas have to provide the farmers with a subsidy to directly acquire packing material and to thus reduce the packaging cost. They have to provide the farmers with the opportunity to collectively purchase the standardized boxes at low prices. And they are to be endowed with the right to check quality of the released standardized goods in order to improve the credibility of the consumers. As an indirect support, prepayment for the release can be confined to the standardized products. Joint transportation from the assembling point and joint investment in the package facilities are desirable to expand the release of the standardized goods. At the same time, the same brand of a union at the producing area has to be used to win the confidence of consumer and merchant so that a high price can be set.
- 2) Preferences in marketing such as a discount in service charge and a priority in sales at the wholesale market have to be guaranteed for the standardized goods to promote the standardization.
- 3) Standardization had to be applied to the commodities that have the highest possibility to enlarge the standardization. In the early stage of standardization, legalization and supervision are needed. A subsidy for the manufacturing of the packing material to produce high quality standardized material at low price and to enable the wider marketing of the material is required. Education of inspectors for checking the quality of standardized goods, establishment of package size, and other complementary measures are continuously needed. However, excessive concentration on packaging and standardization can cause a hike in the marketing cost although they have only a visual effect. Therefore, characteristics of the products have to be sufficiently considered in the process of standardization, grading and packaging.

#### 1. Current Situation

The purpose of marketing credit is to enable the smooth flow of goods among producers, merchants, processors and consumers. It can be divided into short—term credit covering the advancing credit, the credit sales, the credit for the management of the marketing facilities as well as middle and long—term credit which can be used to support transportation, storage, market facilities and processing.

### A. Current Situation of Advancing Credit and Credit Sales of the Merchant

The size of advancing credit loaned by the merchants of Seoul Youngsan Market and Cheongryangree Market reached about 26 billion won in 1983(Table 3).

According to a national report, the percentage and size of the advances credit loaned to the producers by assembler were as follows:

Spice; 44.4%	2,230,000	won	for	each	one
Fruit; 40.4%	5,480,000	won	for	each	one
Vegetable: 14.3%	1.150,000	won	for	each	one

Despite a great risk the credit sale was widely prevalent among the producers, merchants and consumer at almost every step of marketing. The size of credit sales in Youngsan Market and Cheongryangree Market was estimated to be some 27.1 billion won in 1983(Table 4).

According to the table, most of the merchants were using private loans with high interest rates because their trades heavily depended upon advancing credit or credit sale. A jobber or a consigner in Youngsan Market had an aver-

Average Total credit advancing Percentage for a credit Number of Number of Division of loaned merchant traders (unit: one merchants (unit:one merchants million thousand won) won) Youngsan Jobber Market and Consigner: 75.8 74.5 33,297 214.3 849 Middleman: 2,200 3.8 10.0 3.6 1,725 Cheongryang-Wholesaler: 28.2 24,054 45.7 59.8 318 ree

TABLE 3 Situation of Advancing Credit, 1983

Source: Sung, Bai-Yung, Marketing Economics of Agricultural and Marine Products, KREI, 1982.

Average Total credit debt per Percentage Number of Number of sales merchant Division of loaned merchants traders (unit:one (unit:one merchants million thousand won) won) Jobber Youngsan Market and Consigner: 100.0 69.9 205.0 24,151 849 Middleman: 86.3 22.9 2.818 42.0 1,725 Cheongryang-Wholesaler: 31.3 8,717 24.1 86.9 318 гее Market

TABLE 4 Situation of Credit Sales, 1983

Source: Sung, Bai-Yung, ibid.

age debt of 15 million won(90% of them depended upon private loan). Most of the debt had been loaned as advancing credit. And the interest of the loan is transferred to the producers or the consumers.

## B. Short-Term Marketing Credit by Public Institution

In 1983 the AFMC released 2 billion won of loans to the chain food stores as well as the collection and delivery centers for the agricultural and fishery products through the Marketing Facilities Management Fund. In 1982 it spent 36 billion won out of a total of 145.1 billion won from the Operational Fund for Agricultural Price Stabilization as a civilian procurement subsidy for expediting release in wholesale markets while at the same time adopting a procurement project and a civilian price stabilizing project for red pepper, garlic, onions, sesame, peanut, small green peas and apples. It also financed a short-term loan of 128.4 billion won to the agricultural and fishery products storing and processing fields from 1968–1982. A sales subsidizing fund of the NACF covers the advancing credit, the credit sales and the procurement fund of the agricultural products (Table 5, 6).

#### C. Medium and Long-Term Marketing Credit

Medium and long-term marketing credit is mainly offered by the public institutions. The AFMC provided long-term loan of 60.9 billion won from 1968 to 1982 to promote storage and processing of agricultural products. NACF provides a Marketing Facilities Management Fund, medium and long-term credit, as a financial source of NACF's fund, foreign borrowings and agricultural development funds. Most of the funds are spent on the facilities of agricultural cooperative marketing centers and on storage and processing facilities.

# 2. Implication of Improving Credit Service

Marketing credit is aimed at the effective financing and supplying of credit needed by market participants. The principle goals of marketing credit includes

TABLE 5 Situation of Short-Term Marketing Credit of the NACF

					_unit : one	million won
	Division		1980	1981	1982	1983
Advancing credit for sales	<ol> <li>Primary cooperative, horticultural co- operative—farmers</li> </ol>	Cumula- tive total by year	52,385	66,605	84,549	104,273
	<ol> <li>Pre-payment for the supplies to the military</li> <li>Subsidy for export</li> </ol>	"	40,306	21,840 2,407	24,699 1,355	23,543 838
Current outstand- ing of	1. Primary cooperative, horticultural co- operative	Balance	2,103	2,999	7,140	8,206
sales '	2. Cooperative marketing center→jobber	"	1,568	2,199	4,219	7,958
Procure- ment of the agri-	1. Policy oriented procurement	119,561 (15,658)	110,283 (29,178)	112,240 (28,081)	116,650 (23,975)	
cultural products	2. Procurement project for storage	11,763 ( 9,075)	18,808 (16,738)	26,404 (20,766)	27,459 (23,536)	

Note: Figures in the parentheses show the Operational Fund for Agricultural Price Stabilization. Source: NACF.

TABLE 6 Marketing Facilities Management Fund of the NACF

			uni	t:one m	illion won
Field	1980	1981	1982	1983	Total
Processing of agricultural and fishery products	8,138	6,994	6,662	5,110	26,904
Repair of food-grain storage			758	1,456	2,223
Modernization of threshing factories	570	1,000	1,085	3,000	5,655
Grain marketing centers				1,500	1,500
Chilled storage for horticultural products		210			210
Total	8,708	8,204	8,505	11,075	36,452
Grain storage	1,365	1,043	405	433	3,246
Fruit storage		1,887	371	1,870	6,128
Total	1,365	2,930	776	2,303	9,374
Cooperative marketing centers	17,046	25,353	25,317	25,473	93,259
The state of the s	27,119	36,487	36,668	38,851	139,125
	Processing of agricultural and fishery products Repair of food-grain storage Modernization of threshing factories Grain marketing centers Chilled storage for horticultural products Total Grain storage Fruit storage Total Cooperative marketing	Processing of agricultural and fishery products Repair of food-grain storage Modernization of threshing factories Grain marketing centers Chilled storage for horticultural products Total 8,708 Grain storage 1,365 Fruit storage Total 1,365 Cooperative marketing centers 17,046	Processing of agricultural and fishery products Repair of food-grain storage Modernization of threshing factories Grain marketing centers Chilled storage for horticultural products Total 8,708 8,204 Grain storage 1,365 1,043 Fruit storage 1,365 2,930 Cooperative marketing centers  17,046 25,353	Field         1980         1981         1982           Processing of agricultural and fishery products         8,138         6,994         6,662           Repair of food-grain storage         758         758           Modernization of threshing factories         570         1,000         1,085           Grain marketing centers         Chilled storage for horticultural products Total         210         8,708         8,204         8,505           Grain storage         1,365         1,043         405           Fruit storage         1,887         371           Total         1,365         2,930         776           Cooperative marketing centers         17,046         25,353         25,317	Processing of agricultural and fishery products         8,138         6,994         6,662         5,110           Repair of food-grain storage         758         1,456           Modernization of threshing factories         570         1,000         1,085         3,000           Grain marketing centers         210         1,500         1,075           Chilled storage for horticultural products Total         8,708         8,204         8,505         11,075           Grain storage         1,365         1,043         405         433           Fruit storage         1,365         2,930         776         2,303           Cooperative marketing centers         17,046         25,353         25,317         25,473

Source: NACF.

rationalization of the function of marketing credit and improvement in the effectiveness of the marketing credit supporting system. The basic directions for improving credit services might be suggested.

- 1) One of the critical reason that farmers use merchants' advancing credit is because of their need to meet the growing demand for the commercialization of farming. The results are the fact that farmers have limited access to the market for agricultural products, while merchants are under heavy financial pressure. Thus, it is necessary to expand and support public funds to meet the growing demand of farmers.
- 2) The majority of merchants borrow money to alleviate the financial pressure stemming from advancing credit and trust credit. Considering that most loans are private loans, a measure to support them through the institutional credit is needed.
- 3) The purpose of preservation and release of agricultural and fishery products by the Operational Fund for Agricultural Price Stabilization is to narrow the price gap by maintaining stability in the wholesale price and by preventing short-term price hikes. There is evidence that it has worked well. The prices gap of red pepper and garlic at the wholesale market was between 230% and 104% of the price at the retail market during the period of 1978 to 1979 when total loans from the Operational Fund for Agricultural Price Stabilization were below 6 billion won. While their prices gap was at a level of 56%-59% respectively during the period of 1981 to 1982, when over 100 billion won was loaned. However, for some agricultural products, the price gap is still serious. The project for purchase and release of agricultural and fishery products should be continuously expanded to narrow the gap. This will enable producers and consumers to produce and consume without any hesitation or worry. Even merchants will benefit by gaining the stable profits. To do this, the Operational Fund for Agricultural Price Stabilization and loans from it should be increased. The effectiveness of the agricultural price stabilization project should be enhanced with changing demand and taste. Thus, a purchase and storage project is required and, accordingly, an expansion of Operational Fund for Agricultural Price Stabilization as well.
- 4) The enhancement of the marketing efficiency and the saving of marketing cost can be expected by the increase in financial support for the modernization of marketing and additional facilities and equipments. And financial support using long-term low interest rate should be increased for the sorting place at producing area, chilled storages, slaughtering plant for sanitary food supply, transportation facility (freezing/cold storage vehicles) and stores which want to have devleoped facilities.
- 5) With the establishment of Fair Transaction Law, price competition at the stage of marketing should be induced. Participants involved in marketing should be financially supported by the introduction and ex-

ecution of Price Tag System which enables consumers to buy without worry.

# V. Alleviation of Marketing Risk

Risk in marketing means unexpected loss arising in the course of transporting the agricultural and fishery products from one place to another and of trading commodities. It can be divided into physical risk and economic risk. The physical risk is the possible loss in transit due to unexpected damage such as spoiling, reduction, fire, wind and flood. Economic risk is the possible economic loss such as an additional marketing cost and lowered market price because of delayed transportation and unexpected decrease in commodity volume at the time of sale. Alleviation, minimization and way of transfer of risk problems are as follows.

#### 1. Contracted Production of the Farm and On-Farm Sale

Contracted production is one way of transferring the risk arising from producers, and of enabling contractors to control the quality and quantity of agricultural products and to minimize the possible risk while marketing. Another way of transferring physical risk to contractors due to bad weather and economic risk arising from change of price is on-farm sale of easily spoiling agricultural products. According to surveys, contracted production of the farm is confined to some raw agricultural products with small quantity, failing to contribute to the dispersion of risk. On-farm sale is widely accepted in case of easily spoiling agricultural products. But, farmers who are not well-informed of market price and not good at price negotiation are likely to be paid below the reasonable market price.

## 2. Alleviation of Risk in the Transportation

It is common that traders compensate the requestors for physical damage arising from accidents in transportation, on the basis of wholesale price. When products are not delivered in auction time due to the delay of transportation means caused by the not working of vehicles, traffic accidents or bad weather, there come economic risks such as the decrease in the market price. As long as there is no contract on such economic risk, economic risk is the responsibility of the requesting producers. They are not under such circumstances that they can conclude a contract in preparation for possible economic loss for most agricultural products with transporters by land.

## 3. Alleviation of Risk during Storage and Processing

Risks involed in the storage and processing are caused by fire, flood, unusual reduction of quantity, easy food spoilage and deterioration of quality. Usually risks brought by factors other than fire are the responsibility of the owners of the products.

# 4. Collection and Dispersion of Risk of Wholesale Merchants

Merchants' risks come from the inaccurate supply and demand forecasts as well as their subjective forecast in the short and long time. Merchants provide their advancing credit to producers to secure the products, on the basis of short and long-term supply and demand forecasts of their own. Risks involved in advancing credit are that they may not be able to return their credit, in case they fail to secure the volume of expected goods because of bad weather and overall market price fall. Wholesale merchants build networks of fixed clients vertically and horizontally and work with them on the basis of mutual trust in order to minimize or alleviate risks of the return of advancing credit. They rarely dispose their property by public sale to be paid back in case of the loss. Rather, they extend the period of redemption or provide a more operational loan, to farmers to enable them to continue their production activity. This means that they make up for the loss from the excessive profit of the following period, successfully transferring the risk and loss to consumers and producers.

## 5. Alleviation of Risks of Retail Merchants

Retail merchants have risks stemming from the low quality of goods and the decrease in prices of fruits, vegetables and fishery products which involve, the risks due to the gradual degradation of the freshness of goods instead of the physical damage of goods. They use the sales according to price table by hours to alleviate risks. According to survey, retail prices are divided into morning prices, average prices and evening prices. Morning prices are higher than the average price, while evening prices are lower than the average price. This apparently transfers the risks to consumers. They can set the monopolized price onesidedly in small areas.

#### 6. Other Ways for Transfer of Risks

Hedging is a way to disperse risks in the futures market, and subscription to various insurance is another way of transferring risks, which are widely used in advanced countries, but not in Korea.

# VI. Administration of Marketing

The purpose of the administration of marketing is to support the fair marketing of the agricultural and fishery products. Recently due to the increase in the volume of marketed products, the demand for the administration of marketing is rapidly, growing. Thus, measures will be needed. On behalf of the MAFF, several ministries of the Government such as the EPB, the Ministry of Trade and Industry, the Ministry of Health and Social Affairs and other local government with the NACF, NFFC and the AFMC are working for better

marketing. The EPB controls the investrment plans on the entire area of marketing, while the MAFF carries out the whole plans for marketing. The Ministry of Trade and Industry is in change of retail markets. The Ministry of Health and Social Affairs is responsible for the sanitation management of food processing, giving permission concerning the manufacturing of some

TABLE 7 Division of the Tasks by Relevant Departments in Marketing of Agricultural and Fishery Products

The Central Government (EPB, MAFF)	Local Governments (Province, City, County)	NACF NFFC, or NLCF	Marketing Corporation (Including AFMD)
* Establishment of mas- ter plan  * Overall investment	*Revision of city plan *Establishment of mar- keting complex	*Establishment of main production area	*Management of some wholesale markets over the nation
plan *Arrangement of transportation system	*The opening of whole- sale market	*Development of co- operative marketing	*Checking & rearrange- ment of marketing facilities
*Arrangement & expansion of market facilities *Introduction of price	<ul> <li>Balance in distribution between local areas</li> <li>Rearrangement of marketing facilities</li> <li>Establishment of stan-</li> </ul>	<ul> <li>Contract production</li> <li>Purchase &amp; storage</li> <li>Improvement of packaging</li> </ul>	*Preparation for mar- keting facilities  *Survey on marketing system
*The fostering of cooperation body of pro-	dardization and price tag system	*The securing of transportation means	*Collection of market- ing information *Study on trading
ducers *The fostering of consumer protection	<ul> <li>Legalization of quasi wholesale markets</li> <li>Modernization of poor mechants</li> </ul>	*Improvement of efficiency of market- ing project	*Support for the improvement of market-
*Standardized & grade transaction	• Price stabilization at producing area	*The strengthening of the function of jobber	ing education and training *Development & the
*Enhancement of mar- keting law, institu-	*Improvement of law and administration concerning marketing	• Participation of large scale	forestering of proces- sing industry
*Support for study and survey on marketing	*Systemization of mar- keting industry	consumers to producing area *Standardization at	* Price stabilization pro- ject of agro-marine products for govern- ment
*Creation of environ- ment and incentive for middlemen to contribute themselves	<ul> <li>Standardization of trading unit</li> <li>Establishment of fair transaction order</li> </ul>	<ul><li>Producing area</li><li>Supply of information on circulation to producing area</li></ul>	
on marketing im- provement	*Establishment of stan- dardized quantity and price tag system	*Supply of input to farmers  *Supply of fund to farmers	

Source: Sung, Bai-Yung, et al., ibid

processed food. Most items with which retailers deal are agricultural and marine products. But, this has little to do with the MAFF in terms of administration, and it is difficult to realize the improvement of marketing for retail markets.

As for local government's provinces and big cities have administrative sections, but other cities, counties do not have such section, posing difficulties to effectively serve the better marketing down to producers and relevant participants in marketing. In other words, the local self-ruled governmental agents can not practically involve the distribution administration deeply because of lack of recognition of the importance of marketing with insufficient system of the agents(Table 7). Some proposals for more effective administration of agricultural marketing are provided as follows:

- 1) Plans of the central government have to be carried out more effectively by strengthening local marketing administration structure to prepare for the increase of the demand for the administration of marketing.
- 2) Autonomy of the institutions taking charge of the marketing has to be guaranteed, and the improvement in local marketing and efficiency in the marketing general have to be achieved by transferring the role of designating marketing compound, establishing and operating wholesale markets.
- 3) The company for marketing of agricultural, fishery and livestock products must be set up and operated. It will handle the necessary business for the nationwide execution of policies for marketing improvement of agricultural and fishery products. It will comment the government on contributing to price stabilization.

# VII. Concluding Remarks

The evaluation of the marketing supporting functions only is very difficult because the supporting functions facilitate the main or physical functions but their result is mixed up and is hardly identified by functions.

The performance of the supporting functions in agricultural marketing improvement is hardly underestimated but it is implicitly estimated very high. On the other hand the costs of the supporting functions are estimated explicitly and have characteristics of public investment.

Sometimes, it is said that the investment to strengthen the marketing supporting functions is not economically viable. As long as the supporting or facilitating functions have charateristics of public projects, it is said that their implicit economic return is estimated to be high. The public investment and government effects are required. Most marketing functions are not viable in terms of business but highly viable in terms of economy.

#### REFERENCES

- Arnon, I., Modernization of Agriculture in Developing Countries, John Wiley & Sons, Ltd., 1981.
- Bauer, P.T. and B.S. Yamey, "The Economics of Marketing Reform," Journal of Political Economy, 64, No.3(1954): 210 - 235.
- Buzzel, Robert D., Marketing Research and Information Systems: Text and Cases, New York, McGraw Hill, 1969.
- Cox, Charles C., "Futures Trading and Marketing Information," Journal of Political Economy. 84(1976):1215-1237.
- FAO, Training in Agricultural Marketing, Report on the International Meeting on Agricultural Marketing Training, Rome, 1968.
- French, B.C., "The Analysis of Productive Efficiency in Agricultural Marketing," A Survey of Agricultural Economics Literature, Vol.1, University of Minnesota Press, Minneapolis, 1977.
- Hutchinson, T.Q., Consumers' Knowledge and Use of Government Grades for Selected Food Items, Marketing Research Report No. 876, USDA, April 1970.
- Jafri, S.H.A. and D.R. Lifferth, Prices and Quality Comparisons of National Brand and Private Label Food Products, Cornell Agricultural Economics Staff Paper No. 77 - 11, Cornell University, 1977.
- Kim, S.H., Towards Modernization of Agricultural Marketing System in Korea, Chung Ang Univ., Seoul, Korea, 1979.
- Lee, C.Y., Improving National Marketing Systems for Economic Development, A Paper Presented to the 5th World Congress on Marketing, New Delhi, India, 1976.
- Mittendorf, H.J., A Study of Requirements in Marketing Training and Proposals for a Permanent Training Programme in Marketing for the Agricultural Sector, FAO, Rome, July 1980.
- \_,"Investments in Wholesale Markets and Method of Financing," Journal of Rural Development, Vol. II, No. 2, KREI, 1979, pp. 195 - 201.
- Purcell, Wayne, Agricultural Marketing: System, Coordination, Cash and Futures Prices, Reston Publishing Co., Inc., 1979.
- Shim, Young-Keun, "Training and Education for Agricultural Marketing Improvement," NMMPS, KREI, 1984.
- Stigler, G.J., "The Economics of Information," Journal of Economics Theory, 4(1972):154 -
- ,"Efficiency of Marketing Information," Rural Economics Review, Vol. 2, No. 3, KREI, 1979.
- Sung, Bai-Yung, "Efficiency in Agricultural Wholesale Market Activities in Seoul," Journal of Rural Development, 3(1980):127-151, KREI.
- et al. "Agricultural Marketing Modernization Plan in Korea: Its Planning and Implementing," Journal of Rural Development, 8(1985): 1-23, KREI.
- \_\_\_\_\_, National Marketing Master Plan Study, KREI, 1984.
- ,Tax System of Agricultural Marketing Services, Study Report Series 26, KREI, 1981
- \_\_\_\_\_, "The Deveolpment of Agricultural Marketing Infrastructure and Facilities," Journal of Rural Development, 8(1985):93-107, KREI.
- Tickner, V., "New Directions in Food Marketing Policies in LDCs," Food Policy, 3(1978):299 - 307, London.

- Twedt, D.W, "How Much Value Can be Added through Packaging?" Journal of Marketing, Jan. 1968, pp. 58-61.
- Yoon, Hyo-Jik, "Regulation and Institutional Arrangement for Agricultural Marketing Improvement," NMMPS, KREI, 1984.
- Zusman, Pinhas, "A Theoretical Basis of Determination of Grading and Sorting Schemes," *Journal of Farm Economics*, 49, no. 1(Feb. 1967).