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# Rural Market Development Programs in Korea

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# RURAL MARKET DEVELOPMENT PROGRAMS IN KOREA <sup>a</sup>

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## CHAPTER ONE

### INTRODUCTION TO RURAL MARKETING SYSTEM

#### I. BACKGROUND OF RURAL MARKET

The efficient rural market plays key roles to improve whole market system through accelerating wholesale and retail markets to be modernized. As an economy is developed, rural market system is also changed; from barter trade in irregular period to periodic market, and in turn to daily or permanent market.

Korean economy has been rapidly developed during the last decade. Economic growth rate reached 11% per annum and per capita GNP was \$1,242 in 1978. Income distribution in Korea is generally more equitable than in comparable developing countries, and increases in purchasing power have been well spread. In 1978 the average income of farm household was \$3,885 compared with \$3,951 for salary and wage earning households. Total demand for agricultural products as well as nonagricultural products continues to rise rapidly as result of the improving income levels.

The trend in the rate of population growth has been downwards in recent years and the average annual growth rates were 1.71% in period 1971-77 and 1.6% in the period 1977-78. Urban population, however, has been rapidly increasing while ratio of farm population has been declined from 50% in 1970 to 33% in 1978 (Table I-1)

Development of rural infrastructure including road and bridge, transportation and storage facilities, communication and information structure, is remarkable in the recent decade. These kinds of developments in Korea can be major causes for change in relative importance of functions performed by the rural market; the rural market has performed more distribution functions of

nonagricultural products as well as fishery products and less collection function of agricultural products than before.

Ministry of Agriculture and Fisheries is responsible for the marketing control and support of agricultural and marine products. But the basic law concerning the present 934 rural periodic (5-day) markets and 709 urban permanent markets is the market law (1961) pertinent to Ministry of Commerce and Industry (Table I-2).

The Law of Marketing and Price Stabilization for Agricultural and Fishery Products (1976) specifies the establishment and operation of wholesale markets for agricultural and fishery products in urban centers. Under the latter law, municipal governments are able to establish and operate agricultural wholesale markets. In reality, the management and operation of all the public wholesale markets are delegated to civilian wholesale companies who have already fully owned or partly invested the wholesale markets in respective cities. Municipal government are the agency responsible for licensing the market and supervising effective and orderly agricultural marketing practices, but doing almost nothing except licensing. At present there exist 54 wholesale markets for agricultural and fishery products over the nation, which include 35 fruits and vegetable markets, 14 fishery markets and 5 livestock carcass market. This wholesale market structure is closely related to development of rural market system.

The Livestock Law (1963) specifies the establishment and operation of the present 480 rural livestock markets of which the most are located in general periodic market area. Under the law, livestock cooperatives can operate the market under delegation of local government which are agencies for establishment of the market.

National Agricultural Cooperatives Federation (NACF) can establish the urban and rural marketing centers other than the aforementioned public wholesale markets and render the wholesal-



ing and retailing services through its marketing network under NACF law. At present NACF maintains 24 urban marketing centers, 2 supper markets and more than 4,000 retail shops dealing either single commodity or several commodities in urban area. In producing areas NACF operates 39 branch coop marketing center, about 1,800 assembling and sale centers, 1,441 coop chain stores, and 11 express highway collection points whose functioning in general raises some critical suspicion at legitimacy.

National Federation Fishery Cooperatives of NFFC has the same authority concerning market network under NFFC law as NACF has. It maintain 5 marketing centers and 122 retail stores in urban area, and 4 marketing centers and 150 consignment market at landing point and rural area.

## II. RURAL PERIODIC MARKET SYSTEM

The periodic rural markets perform a couple of important economic functions; one is to distribute nonagricultural products including consumption goods and productive factors to rural households, and the other is to collect agricultural products which is shipped to urban markets and consumers. Beside this function, the rural markets has been social, cultural and recreational center for rural people. They meet relatives and acquaintances in the market to inform living news including wedding, birth and death. They attend meeting, circus or theater located in the market. They drink wine and play cards sometimes. In short, the periodic rural markets are center for economic, social cultural life of rural people.

Periodic characteristics of rural market comes from regional distribution of merchants, buyers and sellers, size of market demand not enough to meet permanent market facilities and transportation condition of the market.

In the market area, various supporting and related facilities are built, including marketing service facilities such as

milling plants, slaughtering houses, processing facilities, warehouses, truck terminals, and assembling facilities; public authorities such as county extension, post and police offices, cooperatives, bank, station, and coop-chain stores; amenities such as restaurants, drinking house, tea rooms, hotels, theaters and sports facilities.

The expanding and developing rural periodic markets have such favorable conditions as increases in population in market coverage area, growth in farmer's purchasing power, improvement of transportation conditions, diversification of market functions (wholesaling and retailing) and external factors such as development of recreation center and establishment of public office and industrial plants. Favorite or unfavorable conditions mentioned above determine the success or failure of the market.

### III. FRUITS AND VEGETABLE MARKETING IN PRODUCING AREA

At present there are 934 agriculturally-oriented 5-day markets and 1,768 cooperative sales units plus 11 highway assembling points for fruit and vegetable in rural areas. Market share of the 5-day markets counts as 23% and the latter two cooperative units as 21%.<sup>1</sup> The rest are shipped to urban centers by assembler-shippers or through informal marketing association. Assembling function at the producing areas is mainly in the hands of private merchant, namely, assembler and shipper. It is at this stage that cooperative marketing network appears to be most vulnerable as seen by the above. Small-scale peddlers and collectors by fresh produce from farmers. Shippers usually buy from these merchants or directly purchase fruits and vegetables in the field. Large-scale farmers often ship their product to consignee-dealers in urban wholesale markets, usually tied to credit advanced from

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1 Kim, Y. B. et al. Korea First Urban Wholesale Markets Project, KDI, Seoul, 1978.

the dealers prior to 3-5 months of production. In the areas of commercially-growing fruits and high value vegetables, farmers organize themselves into either a purely civil marketing association or the government-sponsored horticultural cooperative unit for the organized orderly marketing of perishables.

Grading and packing are very poor at this marketing level. Standardization of farm fresh produce in the marketing process are being practised partly over cooperative marketing. And yet, most of perishable commodities are being transacted on a unclassified or poorly sorted basis. Standards for grading and size measuring are not consistent with each other throughout all the marketing stages. The Agricultural Products Inspection Institute, an MAF extended arm, officially weighs and grades those products purchased by the government or for export and imports. It means that the inspection services are not oriented for the marketing purpose. Weights and measures for the same commodity travelling from producer to consumer varied among different market groups and among regions. Different size and kinds of containers used for the same commodity adds a great deal of confusion to the efficient marketing. A bewildering variety of units of price quotations exists among farmers and dealers. As a result, price quotations for the purpose of market intelligence services and statistical files are not so much effective. Presently marketing information services through radio, television and press by NACF alone are mainly confined to the cooperatives marketing channels.

Storage facilities especially designed for fresh produce are practically non-existent in the producing areas except for the urban-located commercial storage facilities.

#### IV. RURAL MARKETING SYSTEM FOR RICE

Rice is a staple in the Korean diet. Rice traditionally moves from producer to consumer through three distinct channels.

First of these consists of government purchases. The government buys up to 40 percent of the total crop as a price stabilization measures for both farmer and consumer. When consumer prices rise beyond what the government considers reasonable levels, expressed in the form of government price guidelines, the government owned grain is marketed direct to consumers at subsidized prices.

The second channel is through the National Agricultural Co-operative Federation (NACF). NACF also has responsibility for handling government rice.

Third channel is the private rice dealer, at the country shipper-assemblers, urban wholesaler and retail shop level. This has been the predominant channel for rice, particularly into Seoul, and represent the traditional system in Korea.

In the past this system worked reasonably well in addition to domestic purchases, the government normally imported substantial quantities of rice, which assisted in her price stabilization program. The majority of rice grown was consumed by the producers, and the nature of production-small, scattered farms-made utilization of traditional marketing channels necessary.

Korea attained self-sufficiency in rice production in 1977. During the process of reaching self-sufficiency, rice production has become more concentrated and more commercialized; and the government has forced a shift to newly developed, higher yielding rice varieties which now account for 70 percent of production. The farmer sells the new HYV rice to the government and NACF and directs his traditional rice to the higher paying private market.

## V. MARKETING OF FISHERY PRODUCTS

The markets in the producing areas are classified into two categories of consignment sale markets of cooperatives and private wholesalers. According to official statistics, 81% of total domestic consumption was marketed through cooperative consignment markets while 19% was handled by private dealers in 1978. Marine

products are enforced to be marketed for domestic consumption should be transacted at places appointed by the Office of Fishery in accordance with the Protection Decree of Marine Resources. Transactions at Consignment markets are carried out by eligible middlemen appointed by the middlemen selection committee. The appointed middlemen should offer mortgage and guarantee money to the cooperatives. They also have to register more than two persons to the cooperatives as the guarantor. At the end of 1978, a total of 2,750 middlemen were working with cooperative consignment markets 16 middlemen per market on the average.

The private wholesalers in the producing area consist of commission agents, private financing agents and inland forwarders. These agents make advance payments to producer under condition that producer bring his products to the agents. These agents collect interest or commissions from producers.

Major transportation means are trucks (2.5 MT, 4.5 MT, and 8 MT). Small size trucks (2.5 MT and 4.5 MT) are heavily used between Inchon and Seoul. But large size trucks (8 MT) are preferred from remote landing ports.

## VI. MARKETING SYSTEM FOR LIVESTOCK

The marketing system of livestock (cattle and hog) and meat (beef and pork) in Korea is free marketing system in principle except that the Government can set the upper limit of retail price of meat, but it has often failed to regulate the market price in practice.

Livestock markets are generally formed in producing areas. These markets play roles in transaction of livestock animals for breeding and collection and transmission of livestock to be slaughtered for consumption. The livestock market for breeding has not much to do with the price formation of meat.

Collection and transmission of livestock for slaughtering are carried out by private merchants such as collectors and ship-

pers, and agricultural cooperatives in producing area. Livestock producers and meat retailers often ship the animals directly to slaughtering house on commission basis.

There are 355 authorized slaughtering houses in the nation in 1978. The law of Livestock regulates that livestock should be inspected by the authorized veterinarian before slaughtering and to be slaughtered only in the authorized slaughtering house. It also prohibits slaughtering of such livestock as breeding stock, pregnant cow and animals under the regulated age and weight. The public wholesale markets which are established by "the Law of Marketing and Price Stabilization of Farm and Marine Products" are scattered in the major cities throughout the country, and they have their own slaughtering facilities. They also provide auction room for middlemen who buy carcass on retailers' risk, and cold storage transportation facilities for meat retailers. In addition to public wholesale markets, NACF marketing center has the livestock section, the function of which is same as that of public wholesale markets. It is prohibited to bring carcasses into the authorized wholesale markets because of sanitary reasons and, therefore, only cattles are to be moved from producing areas to the major cities. But some retailers do such illegal activities as buying carcass in the producing area and transporting it secretly with the common cars which have no cold storage facilities.

Table I-1. Economic Background of Markets in Korea

	1970	1978
Total Land Area (1,000 ha)	9,848	9,895
Cultivated Land (1,000 ha)	2,298 (23.3%)	2,222 (22.5%)
Total Population (1,000 person)	31,435	37,019
Rural ( " )	15,587 (49.6%)	12,355 (33.3%)
Urban ( " )	15,848 (50.4%)	24,654 (66.7%)
Per Capita GNP ( \$ )	234	1,242
Household Income ( " )		
Rural ( " )	840	3,885
Urban (Salary Wage Earning)	1,253	3.951
Per Capita Consumption (Kg)		
Food Grain	213.4	201.5
Fruit, Vegetable	93.8	242.2
Meat	5.2	10.2
Egg & Milk	5.6	8.8
Fishery Products	24.1	45

Source: EPB: Economic Statistical Yearbook, Korea

MAF: Statistical Yearbook of Agriculture and Fishery,  
Korea

Table I-2 Market Situation of Agricultural and Fishery  
Products in Korea

September, 1978

Rural		Urban	
Periodic Market <sup>1</sup>		Permanent Market <sup>1</sup>	709
General	934	Public	97
Livestock <sup>2</sup>	480	Private	612
Ag. Coop <sup>3</sup>		Ag. Coop <sup>3</sup>	
Branch coop marketing center	39	Marketing Center	24
Branch coop retail store	106	Coop supper market	2
Branch coop collection point	1,662	Appointed retail	
Coop chain store	1,441	shop	4,112
Central coop collection point along express highway	11		
Fishery Coop <sup>4</sup>		Fishery Coop <sup>4</sup>	
Marketing center	4	Marketing center	5
Consignment market at landing point	150	Coop retail store	57
		Appointed dealer	65
		Wholesale Market <sup>5</sup>	54
		Fruits & vege- tables	31
		Fishery	14
		Livestock	5
		Quasi-Wholesale Market <sup>6</sup>	
		Fruit & vege- tables	38
		Fishery	15

Note: 1 Under Law of Market (1961)

2 Under Law of Livestock (1963)

3 Under Law of Ag. Coop (1963) and Law of Marketing and  
Price Stabilization of Ag. Products (LMPS) (1976)

4 Under Law of Fishing Coop (1962) and LMPS

5 Under LMPS

6 Wholesale market which is not licensed by LMPS

Source: MAF, MCI, NACF, NFFC



## CHAPTER TWO

### THE STRUCTURE AND FUNCTIONING OF RURAL PERIODIC MARKETS

#### I. INTRODUCTION

##### Definition of Rural Market

Rural market in Korea has traditionally meant an every 5-or 10-day periodic market; namely "Chang" or "Chang-shi". Even now the rural periodic market, as a first contact point for rural residents, plays a pivotal role in the distribution of local products and the exchange of a rural surplus for urban goods such as farm supplies, equipment and daily necessities. The "Chang" also serves as a place for political-social-cultural events disseminating various news and up-to-date knowhows. Even, with no specific items to sell or buy, rural people are gathering in the market place on market day ("Chang-nal") just to meet people and to participate in various social amenities and activities.

In this context, "rural market" in Korea may be defined not only as a market where farmers sell their produce and where the farmers and rural inhabitants purchase their daily necessities, but also as a place for rurally oriented social gatherings and activities.

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\* The All-Korea Rural Market Survey was originally conducted by the author under the auspices of NAERI in 1975 and the survey report was published in January 1977 with the same title appears as above. This report has been supplemented by up-dated case studies on rural and agricultural market systems. KREI and FAO/DSE have financially supported the supplementary case studies.

### Periodicity of Market

As Skinner adequately explains, in most agrarian societies, rural markets are normally periodic rather than continuous day by day:<sup>1</sup> The periodicity of rural markets may be understood from several points of view.

Because the total amount of demand encompassed by the marketing area of any single rural market is insufficient to provide a profit level which enables the producer or trader to survive, the itinerant entrepreneur can tap the demand of several marketing areas and thereby attain the survival threshold. Again, by concentrating demand on certain specific days, marketing periodicity enables such entrepreneurs to combine sales with production in an optimally efficient manner.

From the consumer's viewpoint, the periodicity of markets amounts to a device for reducing the distance he must travel to obtain the required goods and services. No household needs to market every day because of low purchasing power in rural areas. This means that the market dependent area must be very large that villagers at the rim could not attend the market in a single day. However a marketing meeting only once in five or ten days could achieve a viable level of demand even if market towns were much more densely distributed on the landscape than to support a daily market requirement. Furthermore, the friction of distance by the relatively primitive state of transport is a crucial variable which accounts for the periodicity of rural markets.

Finally, the nature of consecutive rural works tied to isolated agrarian societies necessitates human beings to liberate themselves in search for social gatherings and amenities by means of attending to market day as a sort of farmers' week-end relief.

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<sup>1</sup> G. William Skinner, "Marketing and Social Structure in Rural China", The Journal of Asian Studies, Vol. 24 No. 1 November 1964. pp. 10-16.

Thus, the pulsations of economic and social activities which occur as both mobile producers and mobile consumers converge on rural periodic markets define one of the basic life rhythms in all agrarian societies.

### Importance of Rural Market Survey

Needless to stress upon in the process of agricultural and rural modernization is a proposition that proper functioning of the marketing system must go hand in hand with improvements in agricultural production. In this regards, J.C. Abbott adequately points out that modern production is impossible without modern marketing.<sup>2</sup> Yet improvement of the agricultural marketing system could not be fully accomplished without modernizing the traditional rural markets as a first contact place for rural inhabitants. Modernization of agricultural marketing system would only be possible on a basis of thorough information on the structure and functioning of rural markets.

Attempts to modernize the current agricultural market system by the Government sector have only proved to be partial, if not unsuccessful, largely due to few information available on the structure and operation of rural markets. Previous researches on these aspects are either out-dated or fragmentary. Furthermore, unbalanced agricultural policies with respect to the importance of marketing in the development process helped create a sort of vacuum in the study of the rural market system in Korea. Often found are researches on marketing of individual agricultural commodities mainly utilizing commodity approach or functional analysis. A comprehensive study on the rural market system needs to be done if the Korean agriculture is to be commercially developed.

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2 J.C. Abbott, Marketing Problems and Improvement Programs, FAO, Rome, 1958, p27.

### Purpose and Scope of the Study

In 1975 the author had conducted the All-Korea Rural Market Survey in cooperation with National Agricultural Economics Research Institute (NAERI), a former agency of Korea Rural Economics Institute, and Office of Rural Development, Ministry of Agriculture and Fisheries. Thus in 1977 NAERI and the author have published the survey report titled "The structure and Functioning of Rural Periodic Markets in Korea."

The study aimed to develop information on the current structure, functioning and performance of the rural (periodic) markets and their marketing network with a view to improvement of the agricultural marketing system in Korea.

More specifically, this research attempted:

- (1) to explore socio-economic conditions and problems of the rural market operation in performing marketing services for the over-all national economy including rural people;
- (2) to map out the nation-wide market network and blocks, thus to investigate the socio-economic relationship with regional economies and agricultural traffic flows; and
- (3) to review the organizational and administrative arrangements of rural (periodic) market in relation to market operation and development.

For this study, quantitative and qualitative information was obtained from the following sources; i) Literature studies; ii) nation-wide census of 1,551 agricultural and rural markets; iii) market-structure sample survey (150 markets); and iv) interview survey with merchants and rural residents at the periodic markets.

Tabulation and data processing had been made by use of cards, strips and computer system. Processed data were recorded on the Koreas market map and for economic analysis.

The contents of this paper, therefore, are heavily drawn from the above NAERI/S.H.Kim report. Secondary data were updated

and the case studies conducted in 1979 with financial support of KREI and FAO/DSE were supplemented.

### Previous Research

All Korea rural market survey was first and lastly made in 1929 by then Japanese Commissioner Government of Korea as part of their colonial policies. The survey revealed extensive information on the status-quo of the rural markets in Korea. However it did not include analytical study of the structural and operational aspects of the rural market system in relation to the national/regional economic activities. In 1941 Mr. Jeong-Chang Moon, a Korean economic historian, wrote in Japanese a thesis on the Korea's market economy utilizing the official reports and data collected by the Japanese Commissioner Government. The thesis mainly dealt with historical developments of the rural market. Among Japanese written literature there are many other books and articles which dealt, in part, with the Korea's rural market system.

During late 1960s and up to now, marketing studies in Korea have focused on marketing of commodities or functional approach. Rural market system study has been only attempted partially by National Agricultural Cooperatives Federation on the Socio-economic aspects of the periodic market operation to investigate its effects on Saemaul movement. The Korea Marketing Development Center made a marketing map study on the city-located general markets for the first time in 1971. Governmental statistics on rural periodic markets are absent except for the list of name and location. So far little information on the structural and operational aspects of the rural periodic markets and their marketing network is available in Korea but these studies.

## II. HISTORICAL EVOLUTION OF THE RURAL PERIODIC MARKET <sup>3</sup>

According to various historical documents written about Korea, it is known that four types of market existed in SamHan tribal era starting from BC 108. They were fortress town market, ritual market, village market and boundary market. Since then, the succeeding Kindgdoms such as Silla and Koryo dynasties maintained two types of market: capital city markets and country markets.

In AD 668 when Silla dynasty unified then three-divided kingdoms into a single nation in Korean peninsula, there existed 3 capital markets and 462 rural markets. Rural markets in these days operated on fixed days with a 10-15 day interval and covered the average marketing area of 12-16 Kilometers in distance from the market center.

After undergoing the so-called market-contempt policy in early Lee Dynasty (AD 1392-1670), the establishment and operation of rural (periodic) markets had been officially permitted during the King Sookjong era around AD 1674. Thus in 1770, there were 1,064 active rural periodic markets in the Korean peninsular. The operation of periodic markets were linked with each other by itinerant merchants ("Bobusang" in Korean). Influenced by Confucious teachings, Korean government officials in these days lacked the sense of reponsiblility for facilitating the market functions. Instead, the government controlled the market operation so severely that dealers and farmers in the markets were virtually at the mercy of local officials. Accordingly, at the end of Lee Dynasty, number of rural periodic markets reduced to 849 places.

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3 Representative Documents cited for the discussion of this Chapter are: i) Jeong Chang Moon, the Korea's Market, Baeknoon Tang, 1941; ii) Korean Colonial Government, Markets of Korea, 1924; iii) Sung-Hoon Kim, The Structure and Functioning of Rural Markets in Korea, NAERI, 1977; and iv) Lee Dynasty Histories and Court Records

Just after the annexation of Korean peninsular by Japan in 1910, the colonial government undertook the All Korea Rural Market Survey as one of their first public project during 1913-1917. The survey results revealed that there were 1,084 markets functioning in Korea. Following the survey, the Japanese colonial government promulgated the Market Regulations in 1914, in which four types of market were classified. Periodic market was named as No.1 Market. Others were public or private retail market (No.2 Market), agricultural and fuel wood wholesale market (No.3 Market), and grain exchange market (No.4 Market). In 1938 the number increased to 1,458 No.1 markets, 28 No.2 markets, 36 No.3 markets and 12 No.4 markets. The Japanese government heavily relied their "take-home good stuffs" policy on the regulation of market system in Korea. For instance, 68.1% of total transactions in all Korea periodic markets in 1938 were compulsory sales to government-controlled Farmers Association/Financial Association or to government-appointed Japanese merchants. The remaining 31.9% were transacted among civilians.

Following the end of World War II, there remained 668 periodic markets in South Korea, but the number has been gradually proliferated to 934 ordinary periodic markets and 481 periodic livestock markets in 1978, as the volume of rural economy increases. There were also 62 agricultural and fishery wholesale markets active in South Korea. Presently the establishment and operation of ordinary periodic market for farm and nonfarm products is subject to the Market Law under the jurisdiction of Ministry of Commerce and Industry, where as that of periodic livestock market which exclusively deals with domestic animals such as cattle and swine is delegated to Ministry of Agriculture and Fisheries by the Livestock Act. Agricultural and fishery wholesale markets are as a whole stipulated by the Agricultural Marketing and Price Stabilization Act of MAF.

Typical traditional cycles to which marketing schedules have

been tied in Korea are the 10-day cycle and the 5-day cycle. The former cycle provides 3 marketing days in a month on the average, while the latter includes 6 marketing days. With the increased volume of rural economy coupled with its better transport system, a regular 5-day cycle (6 market-days in a month) combining of two 10-days cycles in terms of the solar calendar had become prevalent in rural areas since the late Lee Dynasty.

As the rural accessibility improves, even a more frequent schedule combining of two 5-day cycles (12 marketing days in a month) has been introduced at the end of the Japanese colonial period. The latter schedules have been gradually emerged into a daily marketing system in recent year, as the market town evolves into a busy urban center. And yet more than 99 percent of periodic markets currently operating are observing the 5-day cycle.

The 5-day marketing cycle in Korea is generally made of one of the following five different schedules: i) 1st, 6th, 11th, 16th, 21st and 26th days in the month; ii) 2nd, 7th, 12th, 17th, 22nd and 27th; iii) 3rd, 8th, 13th, 18th, 23rd and 28th days; iv) 4th, 9th, 14th, 19th, 24th and 29th days; and v) 5th, 10th, 15th, 20th, 25th and 30th days in the month. The combination of the two 5-day cycles often observed in urban centers with rural surroundings takes either of the following schedules; i) 2nd, 4th, 7th, 9th, 12th, 14th, 17th, 19th, 22nd, 24th, 27th and 29th days in the month and ii) 3rd, 5th, 8th, 10th, 13th, 15th, 18th, 20th, 23rd, 25th, 28th and 30th days.

### III. ROLE OF RURAL MARKETS FOR SMALL FARMER DEVELOPMENT

When farming was overwhelmingly of a subsistence type, people produced only what they needed to eat with very little left to be marketed. Today, as more and more farmers produce in excess of their family needs owing to advanced farming technology, the proportion of their production moving into the market is rising rapidly. However, potentially available production resources are



not being properly utilized largely due to inefficient marketing systems to translate the development activities into profitable opportunities.

In this respect, the role of rural markets should be viewed as a crucial frontier for farm people where they may sell their surplus profitably and purchase farm inputs and daily necessities at reasonable prices. Relatively good accessibility to markets and availability of needed agricultural supplied and equipment cum consumption goods become essential to successful agricultural development.

#### Distribution of Rural Markets

There are three types of rural periodic markets in Korea: (1) ordinary periodic market (OPM) (2) ordinary periodic market accompanied by neighboring livestock-dealing market (OPLM) operating in the same locality on the same market day, and (3) independent periodic livestock market (IPLM).

According to the author's Census Survey in 1975, there were all together 1,551 periodic markets in South Korea. On the basis of the locality concept which counts OPLM market as one, the number adds up to 1,051 rural markets. In other words there were (1) 452 ordinary periodic markets (OPM), (2) 500 OPL markets, and (3) 33 IPL markets. In addition, there were 66 ordinary periodic markets which became almost defunct due to their meager marketing power.

MOCI government survey identified that there were 1,415 rural periodic markets in total at the end of 1978. Of the total, ordinary periodic market accounts for 934 markets and the rest (481 markets) are perodic livestock markets. According to the 1975 Census, about 45% of total periodic market are rapidly growing in the size and quality of trade and are likely to function as daily market in the near future, whereas approximately 17% are declining year by year due to economic annexation by adjacent

Table II-1 Distribution of Rural Periodic Markets by Type of Market, 1975 and 1978

Province	OPM <sup>1)</sup> (A)		OPLM <sup>2)</sup> (B)		Subtotal Op Mar- kets(A+B)		IPLM <sup>3)</sup> (C)		Subtotal PL Mar- kets(B+C)		Defunct Markets (D)		Total Rural Mar- kets(A+B+C+D)		Total Rural Markets (A+2B+C+D)	
Year	'75	'78	'75	'78	'75	'78	'75	'78	'75	'78	'75	'78	'75	'78	'75	'78
Seoul	-	-	-	-	-	-	1	-	-	-	-	-	1	N.A.	1	-
Gyeonggi	39	N.A.	44	N.A.	83	78	5	N.A.	49	41	13	N.A.	101	"	145	119
Gangweon	34	"	33	"	67	73	8	"	41	38	7	"	82	"	115	111
Chungbuk	20	"	50	"	40	68	1	"	51	43	3	"	74	"	124	111
Chungnam	57	"	52	"	109	103	1	"	53	48	8	"	118	"	170	151
Jeonbuk	32	"	35	"	67	63	2	"	37	34	7	"	76	"	111	97
Jeonnam	79	"	71	"	150	144	2	"	73	61	3	"	155	"	226	205
Gyeongbuk	90	"	116	"	206	213	3	"	119	111	10	"	219	"	335	324
Gyeongnam	90	"	92	"	182	172	7	1	102	90	15	"	204	"	296	262
Busan	-	-	-	-	-	-	3	1	3	1	-	11	3	"	3	1
Jeju	11	N.A.	7	N.A.	18	20	-	N.A.	7	14	-	N.A.	18	"	25	34
Nation	452	N.A.	500	N.A.	952	934	33	N.A.	533	481	66	N.A.	1,051	N.A.	1,551	1,415

\*\*\* 1) Ordinary periodic market,

2) Ordinary periodic market accompanied by periodic livestock market in the same locality,

3) Independent periodic livestock markets

Source: S.H. Kim All Korea Rural Market Survey Report, 1977,  
MAF Livestock Market Survey, 1978; and  
MOCI Market Registration Survey, 1978

larger markets. The remaining 38 percent are simply maintaining the same level of trade.

When the author made the first nation-wide census of Korean rural markets in 1975, the trade amounts as used as the criteria to classify these three categories were as follows: Standard Market under 5 million won per market day, intermediate market between 5-10 million won, and central market over 10 million won. As the value of money with the trade volume increase, suggested new criteria are: LT 10 million, 10-20 million and over 20 million won.

Of the 952 active ordinary periodic markets, approximately 82.2 percent are classified into the category of standard (basic) markets, whose per market-day transactions fall within less than 5 million won (US\$10,417). About 14 percent may be termed as intermediate markets, which, on the average, handled with 5-20 million worth goods for a market day. The rest are the so-called central markets mostly consisting of urban centers. <sup>4</sup>

The All Korea Rural Market Survey in 1975 has found that 1,043 rural markets in South Korea were the 5-day cycle; i.e., 6 marketing days per month. Other 4 markets combined of two 5-day cycles were opening 12 market days a month and the remaining 4 markets had irregular marketing days. Of the 5-day cycled markets the market day schedule of 1st and 6th days were held in 210 places, that of 2nd and 7th days were in 192 markets that of 3rd and 8th days in 217 markets, that of 4th and 9th days in 206 markets, and that of 5th and 10th days were observed in 214 markets.

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4 For the conceptual classification of market hierarchy, read Brian J.L. Berry, Geography of Market Centers and Retail Distribution, Prentice-Hall, Chapter Three (citing W. Christaller, August Loesch and G.W. Skinner), 1967.

### Market Dependent Area

The Census results reveal that an average ordinary periodic market comprises 1.45 Eup (town) or Myon (district) with 61.5 natural villages in an average market area of 91.6 Km<sup>2</sup>.

A typical market serves a total of 3,267 households with 17,512 persons, of which farm population accounts for about 74 percent. (See Annex Table)

The largest average market-dependent area covered is as 209.55 Km<sup>2</sup> in Gangweon province, followed by the second largest per-market dependent area of 125.66 Km<sup>2</sup> in Gyeongbuk province. Both are belonged to relatively mountainous region where population is sparsely distributed and/or transportation conditions are poor. The least per-market dependent area is 57.69 Km<sup>2</sup> in Gyeongnam province, a relatively plain region with good transport systems.

In terms of population served by an average market, Jeonbuk province comprises the largest number of people per market: i.e., 25,307 persons, whereas Gyeongnam province has the smallest number of 11,522 persons per market. The difference between the above two provinces may be explained by relatively small number of markets serving in the less developed Jeonbuk province.

### Market-Day Participants

Periodic markets, in general, open at 8-10, a.m. and close around 3-5, p.m.; and the most busy hours are between 10:00, a.m. and 3:00, p.m. These busiest season of market in Korea falls in the months of February before lunar calendar New Year, September around lunar calendar August Moon and November just after rice harvest. The slack season is May, June and October when farmers are most busy in cultivation and harvest of grain crops.

Market participants are farmers-consumers and traders. On the average throughout the year, 66.3 permanent and 97.6 itinerant vendors are seen in a market place during a market day with

about 1,110.7 rural inhabitants and farmers. Permanent merchants are those who have shops, fixed stalls or marketing sheds in the market yard. They are either assembler/shippers of agricultural products or sellers of various industrial goods. Some of them are daily operators. Itinerant vendor moves around a certain market network on scheduled market days, selling industrial commodities and agricultural inputs. Some permanent merchants have stalls in other markets so that they also move around the markets on each market days.

<u>Per Market-Day Participants</u>				
Permanent Vendors	Merchants		Farmer-Inhabitants	Total
	Itinerant Vendors	Sub-Total		
66.3	97.6	163.9 prs.	1,110.7 prs.	1,274.6 prs.

About two thirds of farmer-inhabitants come to market from surrounding countrysides within a radius of 4 Km; 30% are living in 4-8 Km; and the remaining 6% are from 8-12 Km. Of these farmer-residents, more than two thirds attend the market on foot and the rest are depending on animal-dragging cart, motor tiller and bus. The one-way trip to the market takes an average of 30-60 minutes.

On the average, a farm family, either as a individual or in group, participates in the market day about 44 times a year. The family made a rule to visit 2.3 periodic markets as their marketing needs differ in both quality and quantity.

According to the author's field survey, a little over 44 percent of market participants replied that their main purpose of visit to the market is to sell the farm produce. About 46 percent said they came for buying farm supplies and daily necessities, while 10 percent listed other than non-economic reasons such as acquiring various information and news, meeting with people, and concurrently conducting business with cooperatives, guidance office, governmental or public agencies.

The case study results find that an average merchant covers

2.9 periodic market for about 16.5 days marketing activities. Approximately 73.7 percent of vendors surveyed are classified re-tailers; 10.6 percent are wholesaler-retailers; 10.5 percent are assemblers collecting agricultural products; and the remaining 5.3 percent are agricultural shippers.

One of the important findings in the survey is the role of weighmen in marketing farm products. Weighmen, so-called "Seung-Soo" or "Doejaeng-i" number about 10-30 in an average Jeonnam province market. Their functions are weighing, measuring and grading farm products both for farmers and merchant-buyers, and also purchasing commodities for shippers or urban wholesalers as middlemen. In any case, they collect commission for the weighing services from farmers mostly in kind, i.e., the remaining products after the regular measurement. If there are no surplus, they charge fees in cash.

The number of vendors and participants shows an increasing trend year by year as the volume of economy grows and as transportation means develops so rapidly. But the increase in the number of merchants is mostly attributable to the increasing volume of consumption goods; i.e., there appears more and more retailers in the market as the level of rural living upgrades.

#### Trade Volume of Periodic Markets

More than a thousand items are sold and purchased at the periodic market. Agricultural products traded are rice, barley and other grains, various kinds of domestic fruits and vegetables, raw and dried fishes. At the periodic livestock market, cattle, swine, goat and poultry are transacted. Various farm equipment and inputs, electrical equipment, electronical items and such daily necessities as clothes, shoes, and household utensils are also popular trade-items. Medicine, herbs and unique native products are often proudly brought to market by local people.

Per market-day volume of trade excluding live animals averaged

at 4.8 million won (US\$9,910 equivalent) during 1975. In other words, the annual transactions made in the typical market amounted to about 347.3 million won (US\$723,430) and to about 3.8 million won (US\$7,900) per square Kilometer of market dependent area. Again, the annual sales value may be counted equivalent with 106.3 thousand won (US\$221) per household and 19.8 thousand won (US\$41.3) per farmer in an average market area. Total transactions in all periodic markets of Korea excluding livestock amounted to about 330 billion won (US\$687.5 million equivalent).

Of total amount traded in a typical periodic market, foodgrains accounted for 39.8%, other crops for 13.8%, fishery products for 8.6%, farm supplies and equipment for 5.7%, and household goods and other industrial commodities made up for 32.0%.

This means that approximately 53.6 percent of total sales are agricultural trade amounting to 176.9 billion won. In the same year of 1975, total value of farm production excluding livestock and its products was 2,147.7 billion won, of which about 1,095 billion won or 51% were estimated as the actual off-farm sales amount.

The marketing share of rural periodic markets in the total sales of agricultural products was to be around 16.2 percent in term of value of transactions. A case study made in the Whasum County, Jeonnam province ascertained that the physical market-throughput of farm production averaged as 19.1 percent 1977.

Farmers interviewed indicated that about 30.3 percent of foodgrains they marketed, 60.4 percent of fresh produce and 70.6 percent of industrial crops were sold at the periodic market during 1975. The recent case study, however, shows a decreasing trend of agricultural sales through the periodic market exits, as accessibility to larger urban centers and to cooperative marketing channels gradually improves (See Table 2).

The similar trend was also observed in the farmer-inhabitant purchasing pattern of industrial goods at the 5-day market. In

Table II-2. Agricultural Production, Marketable Surplus and Periodic Market Throughputs, Whasun County 1977

Commodity	Production (A)	Marketable Surplus(B)	Market Throughput (C)	C/C (%)	C/B (%)
Rice	38,178	23,900	3,380	8.9	14.1
Barley & Wheat	28,150	15,900	1,500	5.3	9.4
Miscel foodgrain	110	60	20	18.2	33.3
Pulses	2,722	1,860	430	15.8	23.1
Potatoes	20,617	11,830	4,815	23.4	40.7
Fruits	1,786	1,660	591	33.1	35.6
Vegetables	1,529	1,260	425	27.8	33.7
Special Crops	1,520	1,340	646	42.5	48.2
Total	94,610	61,810	11,807	12.5	19.1

Source: Ministry of Agriculture & Fisheries Data and Field Survey Data by S.H. Kim

1975 about 85 percent of side-dishes, 28 percent of seeds and chemicals, 50.2 percent of small farm equipment, 9.6 percent of wedding preparations and 11.6 percent of electrical equipment were bought at the periodic market. The percentage in 1979 decreased by 5-20 percent depending on the nature of commodities owing to improved access to urban/rural daily markets and relatively successful cooperative programs. Reflected by changes in the market use pattern as described above, sales of industrial goods increase at a faster rate of that of agricultural produce in the growing periodic market.

It is estimated that in 1978 an average sales of about 12 million won (US\$24,742) worth of the above agricultural and industrial goods were traded in a typical periodic market-day. The annual sales of all Korea 934 periodic markets add up to about 581 billion won (US\$1.2 billion) on 1978 market prices. The recent case study findings reveal that the proportion of agricul-



tural products to total sales decreases to 43.5%; that of fishery products accounts for 9.1%; and that of farm supplies and equipment comprises about 5.0%; whereas the ratio of consumptive industrial goods including household stuffs sharply increases to 57.6 percent of total sales in 1978.

The relatively low level of the periodic market throughputs may be explained as a result of gradual improvements in marketing methods. The majority of rice, barley, sweet potatoes and other price-support products are directly bought by government as an incentive program. Since the middle of 1970s, agricultural co-operatives have also launched an energetic cooperative marketing program tied to the government's production increase programs. A great deal of shipments to expanded urban wholesale markets now are made directly by farmers, either acting as individuals, through village shipping associations, or through special and district cooperatives. Lastly, it seems to be a general trend that the function of periodic markets in recent years has been changing from agricultural product market to industrial/consumer product market. There appears to a tendency that the number of permanent stores and stalls selling daily a variety of grouped industrial goods and services within the market in addition to prosperous daily stores outside the market in the town's territory. Besides, as many as large scale assembler-shippers in downtown business street are providing marketing services, as the size of market becomes daily supportable in rural area.

Apart from the sales of volume of an ordinary periodic market, a total of 1.8 million head of cattle and 0.8 million head of swine were traded in the nation's 533 periodic livestock markets in 1975. An average handling of a typical market was 66.7 head of cattle and 28.9 head of swine on a market day, or 3,470 head of cattle and 1,500 head of swine per annum. The livestock traded in all nation's markets totalled about 400 billion won worth.

However, in 1978, a total of 1,653 thousand head of cattle

and 502 thousand head of swine were actually traded in all Korea 481 periodic livestock markets. An average market-day trade of cattle and swine in a typical livestock market was 66.1 head and 20.1 head, respectively. The decreasing number of transaction may be explained by the decline in domestic livestock production due to the import liberalization policy recently adopted by the Korean government.

By the Livestock Law, all the cattle are subject to be transacted in the livestock market in Korea. Thus, in 1978, of the total 481 livestock markets, about 43.9% of them transacted in a market-day less than 50 head of cattle; 38.7% traded a range of 50-150 head; 13.7% handled with cattle between 150-300 head; and only 3.7% sold more than 300 head of cattle in an average market day.

#### IV. PHYSICAL FACILITIES AND LAYOUT OF RURAL PERIODIC MARKET

A typical rural periodic market is located in the town of county (Gun) and/or district (Eup or Myon) within 1 Kilometer from town office. The average site area of rural markets in the nation is 2,611.2 pyong (8,617 m<sup>2</sup> equivalent), on which 60.4 stalls and sheds with building area of 354.1 pyong (1,169 m<sup>2</sup>).

Since most of periodic markets in Korea open once a fifth day, the physical facilities in general appear to be relatively very simple and poor. That is, approximately 26.1% of total periodic markets in Korea are housed only with open-wall tin-roofed stalls and marketing sheds together with vinyl awnings on bamboo poles. 13.8% are concrete or wooden store markets, and the majority 50.1% belong to a mix of both categories.

Facility requirements of the periodic market by Market Law are relatively very lenient. If the market has buildings on it, facilities for fire protection, ventilation, sun shine protection, public toilet, municipal water and sewage treatment are required to equip. Otherwise, the market without regular build-

ings needs not to equip with the above except sewage and trite facility.

Thus, it is not strange matter to find that many of the periodic markets are simply market yards with simple open-wall roof-stalls. Most of periodic markets (92.7%) have not either a modern drink water system or a well-facilitated sewage system. However, being located nearby or alongside river or stream, they have a relatively good access to water for wash and drainage causing pollution in the area.

Most of market yards are not paved but are relatively well taken care of using gravels and sand. Some markets have terribly muddy yards and have not properly maintained. Even livestock markets which have to hygienically handle with animal wastes are lacking good marketyard maintenance with proper sewage system.

Thus, Marketing facilities at the periodic market are not only inadequate, but also less hygienic. Marketing-facilitating facilities are almost non-existent in the market itself. Programs and services for market promotion, development and inspection are also unseen on the market. Standard weighing and measuring equipment for public use cannot be found at the market.

Storage facilities at any markets are definitely inadequate not only within the market but also in adjacent town areas. Lack of storage and processing facilities in the agricultural region expedites the marketing rush in harvest season aggravating the price movements. Also seriously affected is the heavy burden of transportation system in the season. However, meeting with transport requirement's satisfactorily only in one season does not afford an economy of scale throughout the year round. As more and more marketing support activities and facilities converge around the market, the commercial components of rural economy significantly increase.

An average livestock market occupies 667 pyong (2,301 m<sup>2</sup>) of market area on which 61.6 pyong (170 m<sup>2</sup>) of simple office and/or

cattle-weighing scale building and swine sales shed. On the market yard mostly with gravel and sand paved, iron-or stone-bar post are erected for cattle on sale tethered. According to the 1975 Census, only 20 percent of livestock market yards are well-paved with cement and modern drainage/sewage systems.

A typical rural periodic market is located in the center or within one Kilometer radius of township heart. River or stream is run by the market. Livestock market is usually situated within a distance of 500m to 1 Kilometer away from the ordinary periodic market. Marketing stalls and sheds with tin or wooden roof and pillars are erected on the center of the market yard. Surrounding the stalls in line are snack bars, simple restaurants, street stralls and residential houses. It is not uncommon to find no market authority building or public agency offices just on the market itself, because they are generally located in the downtown and supervision for market operation is almost non-existent except for collecting market use fees by the local government officials.

The space of market yard and sheds is generally allocated for grouped commodity blocks as follows: 19.9% of the space for food-grains, 11.3% for vegetables, 7.1% for fruits, 7.0% for special crops including forestry products, 12.2% for raw fish and dried one, 18.0% for clothes and textiles, 19.2% for shoes, pottery and other daily necessities, 7.2% for seeds, pesticides, farm supplies and equipment, and 9.6% for miscellaneous goods. Service facilities including snack bars and toilets are excluded from the above figures. Noteworthy is the fact that agriculturally-oriented spaces occupy 52.5% of total market site.

Stalls and sheds are not only poorly constructed, but also are situated with very narrow walking path causing a great deal of traffic congestion. Market yard itself has no designated road within it. In many case, the periodic market is equipped with no loading and unloading facilities. Residential house and even a primary school are located just next to the market. It is,

however, observed that as the market becomes larger and more consumer-oriented than agriculturally-oriented, the primitive state of market facilities convert into modern store market.

## V. SUPERVISION AND ADMINISTRATION

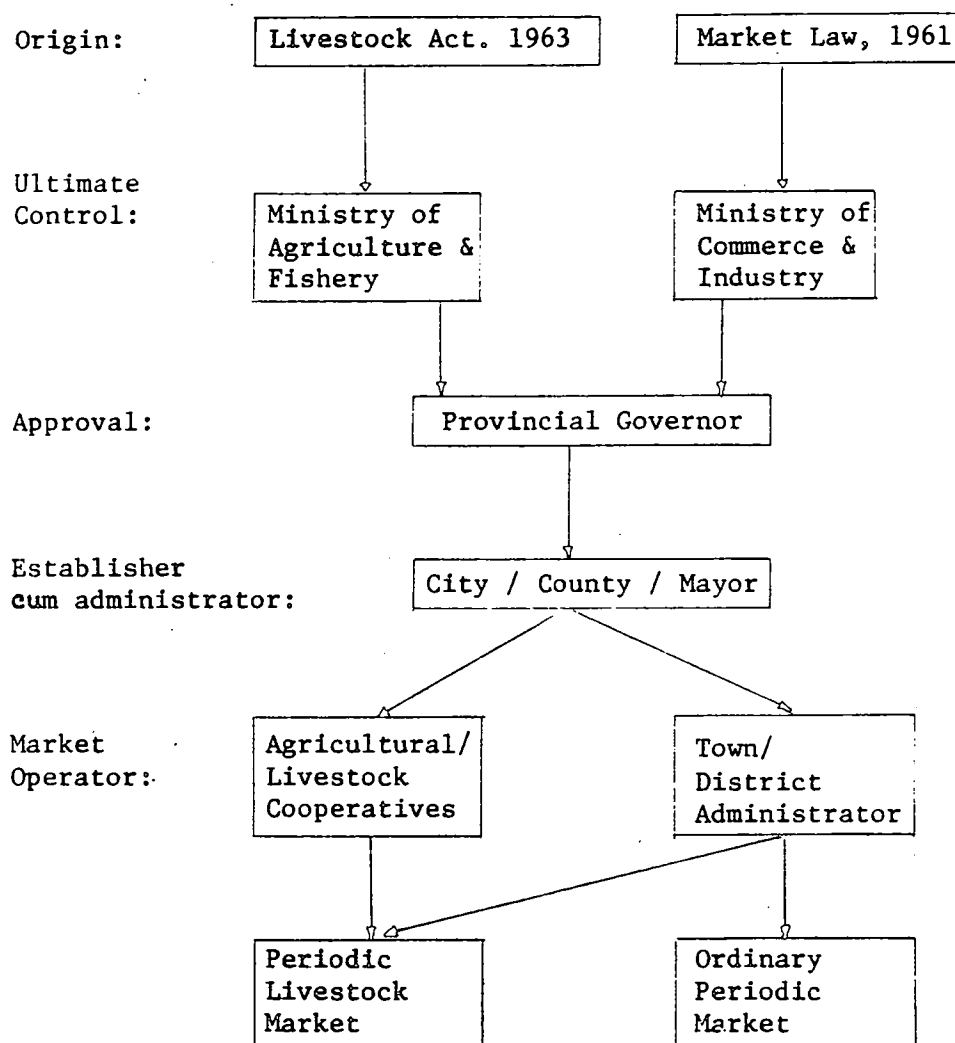
Establishment and management of ordinary rural periodic markets are under the ultimate control of Ministry of Commerce and Industry (MOCI) by the provisions of the Market Law (No. 704) promulgated in 1961, whereas that of livestock markets has been subscribed by the Livestock Act (No. 1,363) of 1963 with the initiative of Ministry of Agriculture and Fishery (MAF). The agricultural wholesale markets in urban centers are subject to another act, the Agricultural Marketing and Price Stabilization Act promulgated in 1976, and thereby endowing MAF with the final supervisory power. Other types of markets such as retail stores and public bazaar markets are under the jurisdiction of MODI by the Market Law.

Under the supervision of MODI, the provincial governor may approve the establishment of ordinary periodic market under the direct commencement of city/county mayor. However, duties and responsibilities of actual supervision and management may delegate to Eup/Myon district administrator. On the other hand, the steps and procedures for the establishment of livestock market are the same as the above under the supervision of MAF, but only such legal persons as agricultural or livestock cooperatives are to be designated as an actual operator of the market.

It should, however, be remained that each of five hundreds of the ordinary periodic market and the periodic livestock market are located in the same place of the same district and operated on the same market days. Nevertheless, the jurisdiction of the two types of market is differed with each other and also the actual market operator at the county or district level differs; i.e., Eup/Myon administrator in charge of the operation of ordinary

market and agricultural/livestock cooperatives responsible for the operation of livestock market. This means that the latter two agencies, respectively, take orders from two different ministries on the management and supervisory tasks through city/county mayor as a common official establisher.

Figure II-1. ORGANIZATION & ADMINISTRATION



At the City/County level the periodic markets are controlled by the local government's ordinance with respect to market establishment and/or management, which is subject to approval by the upper-level governments. The contents of the market ordinance vary significantly by city and/or county. By the provisions of the city/county Market Ordinance, the towndistrict (Eup and Myon) administrator is directly responsible for such matter as approval of occupants (previleges), collection of marketing fees and development charges, transfer of previleges, and market users' organization. But no specifications related to sanitation control, orderly marketing and public services are found in any city/county ordinances.

In both ordinary and livestock periodic markets, town administration office simply made a rule to collect market-use fees from all seller-vendors without specifically ear-marking the revenues for reinvestment. On market day, a few temporarily-employed parttime officers visit around the market place or stand at the entrance gate to collect the market-use fees. Even at the gate of livestock market yard the town office collects the so-called entrance fee from every livestock entering the market for sale. Meanwhile, agricultural/livestock cooperatives also collect marketing fee (sales charges) from sellers of individual cattle and swine traded in the livestock market yard. Therefore, it is obvious that the market operation system at the market place level of county/town duplicates with each other.

And yet there seems to be no compulsory regulations which requires the county/town revenues to be re-invested for the market improvement. In the ordinary periodic market itself, there is no autonomous organization responsible for market operation. As said before, town office is just delegated to collect the fees and the direct responsibility lies in the city/county mayor aloof from the market. Accordingly, no regular administration staff for market; that is, a sort of administrative vacuum in market management is

commonly observed in ordinary rural markets. Out of 952 ordinary periodic markets surveyed (in 1975), about 73.8% are directly operated by town and district administrator as discussed as above. Approximately 14% are administered by the market association composed of by civilian-merchants and the remaining 12.2% are operated by either a civilian legal body (corporation) or individuals. The operation of ordinary periodic markets by the market associations and the market operating corporations are officially delegated by local governments.

On the contrary, livestock markets are in general relatively well-operated by agricultural/livestock cooperatives in the sense that they employ, on the average, 2.9 regular personnel stationed in the market to supervise sales and trade and to properly maintain the market. Salaries for these staff are paid well enough from their marketing fee revenues.

There are a few number of dealer's informal organizations in county or town market, mainly consisted of rice and foodgrain dealers and weighmen. The organizations, however, do neither represent, nor delegate to the market management, but just acts as a foodgrain dealers' selfhelp body. Traditionally there was the nation-wide market vendors organization which had influenced even the politics, but nowadays it is nowhere found except for a district level friendship meeting of such market vendors. Brokers in the livestock market also have its mutual aid organization. These organizations could be usefully utilized if the government is to deliver a certain educational program.

## VI. TRADING PRACTICES, EFFICIENCY AND SUPPORTING SERVICES

### Market Management

It must be painfully admitted that in Korea the importance of marketing development through improved market institutions, facilities and methods has yet to be properly acknowledged at both county and national administrative levels.



Empowered by the Ministry of Commerce and Industry (Market Law) through provincial governor, the city/county mayor with first-hand help of subcounty(town) administrator assumes full-pledged administrative duties and responsibilities to manage and operate all the periodic markets in the county territory. In reality, as mentioned earlier, neither the county government nor the town office has manned a full-time management official with the market system, of which the case is almost fashionable throughout the country. And it is customary that all of the revenues generated from markets have been pooled into the general account, and thereby the funds are budgeted not only for market operation but for other uses. And needed market improvements generally receive the least attention.

Therefore, orderly, fair and efficient marketing has been almost entirely left to market participants. Nearly a half of periodic markets in four large provinces as Gyeonggi, Gangweon, Chungbuk and Gyeongnam are delegated for market management to such civilian agencies as merchants' association and wounded-veterans organization or to individual entrepreneur.<sup>5</sup> In fact, market management meant to the government officials is very simple: collect the market use fees and other charges for fire and theft protection and estates-clearing services. No direct marketing services are rendered by any of the above agents.

Market employees for the afore-mentioned tasks, either being done by town office or civilian organization, averaged 3 persons in 1975. In case that town office manages the market, the local government employs 2-4 temporary workers to collect fees. Due to short of manpower, such routine works as clearing

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5 Approximately 73.8% of ordinary periodic markets in the country are managed by town/district offices, while 14.2% are entrusted to civilian organizations and the remaining 12% to individual agent. The proportion of the latter two non-public management to total are 57.2% in Gyeonggi, 53.4% in Chungbuk, 46.1% in Gangweon and 34.6% in Gyeongnam.

and fire and theft protection are usually performed by market store keepers who pay extra fees in group regularly for the services.

Strange enough observed in elsewhere in rural markets is the position of agricultural cooperatives in marketing activities that are keenly competitive with the function of ordinary periodic markets rather than seeking for a great complementarity. Because of this, a few years ago, even NACF (National Agricultural Cooperatives Federation) had attempted unsuccessful efforts to prove that the periodic market was unnecessary and should be diminished. It is, however, fairly successful that on behalf of the government, cooperatives manage and operate livestock markets and live well together with livestock merchants.

Both market control and service systems must be integrated with an aim to deliver effective management services. The administrative inability to control the illegal trade practice leads to exorbitant margins and other abuses such as provision of false price data to farmer-shipper and cheating of weights, measures and grades. A through review of the current market management (collecting/utilizing) system is required for efficient and equitable marketing activities. Furthermore, building-up the administrative and supervisory institutions in both central and local governments is essential to an effective marketing system.

As to the manpower requirement, public work load should be evaluated. For example, types of public services together with the amount of job to be done can be estimated without great difficulties.

All the periodic markets are operated on the basis of personal transaction between individual seller and buyer. However, in the livestock market cattle sales are subject to broker's negotiation if not auctioned by the official bidder. In 1978, out of total 481 markets, only 28 markets are practising the bidding System and the rest are following the traditional

brokerage system. The latter system has been continuously causing undesirable disputes and illegal practices in the livestock markets

### Marketing Fees

Marketing fees charged to the seller-vendors at periodic market include: 1) monthly charges of market use to every store keepers and permanent stall operators ranging from 300 to 1,000 won per pyong (3.3 m<sup>2</sup>), 2) daily charges of market use towards peddlers and mobile vendors occupying certain space in the market site ranging from 50 to 200 won per pyong, 3) market entrance charges for every animals brought by farmer-seller to a livestock market ranging from 50 to 200 won per head, and 4) livestock sales commission charges made by agricultural/livestock cooperatives to one head of cattle sold at the livestock market ranging from 2,000 to 4,000 won per head.

The first three categories of fees are collected by Eup/Myon (Subcounty) office on behalf of the respective city/county mayor in accordance with the city/county market ordinance. It was revealed that 9.5 million won a year (11,370 won per market day) of the first three categories was collected in 1975. In 1978 the amount of revenues per market a year was estimated as 27.2 million won: The author's calculation of the revenues based on the field survey indicates that the amount should have been much over 3 times to the actual, meaning there might had been a great deal of revenue escape. Market-use charges are collected by temporary employees of Eup/Myon office at the market on market days. Especially with respect to mobile vendors and peddler's charges, the collector judges the amount of payment on the spot which is in many cases negotiable between parites related.

Market entrance charges for livestock are collected at the front gate of the livestock market by same Eup/Myon office and any entress are never able to evade from the charges. As pointed out earlier, revenues collected from the periodic market have

seldom been re-invested for the improvement of market facilities. As a matter of fact, few people care about the use of the collected market fees.

Total livestock sales commission in Korea's 481 livestock markets amounted to 2,116 million won in 1976 and 3,608 million won in 1978.<sup>6</sup> The commission revenues collected by cooperatives together with other incomes and the central government's subsidy are used for the following categories in 1978; 1) personnel salaries and wages (18.4%), facilities and equipment (13.6%), artificial insemination cost for farm cattle (39.9%), livestock mutual insurance fund (4.7%), brokerage payments to brokers (11.3%), and administration and other expenses (12.1%).

For the first time in 1978, the government attempted to classify livestock market-managing cooperatives into five classes on the basis of the amount of sales commission revenues collected from the livestock market.

That is, 1st class cooperative whose annual commission revenues exceed 50 million won numbers 13 units; 2nd class cooperative with the revenues amounting between 30-50 million won numbers 34 units; 3rd class with the livestock commission revenues between 20-30 million won numbers 28 units; 4th class in the range of 10-20 million won counts 41 cooperatives; and finally 5th class whose revenues amounted less than 10 million won numbers 21 cooperatives.

In 1978 there are 137 primary cooperative units who manage the livestock markets in Korea; 48 agricultural cooperative units and 89 livestock cooperative units. The above-classification criteria could be further applied to the market-grading in terms

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6 In 1978, Ministry of Agriculture and Fisheries subsidized the livestock markets with the amount of 735 million won for public purposes. Other incomes from the livestock market operation generated another 986 million won. All these and up to a total revenue of 6,133 million won in all 481 livestock markets.

of number of animals handled in every market, for which the 1975 census report strongly recommends.

### Pricing Efficiency

The present marketing and pricing system favors neither consumer nor producer, in the sense that so far no party has explicitly gained from recent large yearly and seasonal price movements. It is not uncommon to frequently observe drastic price drops in harvest season while consumer prices sharply increase in off-season. Coefficients of variation in farm prices very ranging from 31.8% for garlic to 168.4% for chinese cabbage.<sup>7</sup> The degree of price fluctuation ranges from 40.8% for green welsh onion to 181.4% for round onion.

Futhermore, wholesale prices of farm produce in urban consumption centers have been increasing at a much faster rate than those of the farm gate prices and the rural primary market prices, reflecting the inadequacy of the current marketing system, especially with the physical distribution facilities including market information, credit and outlook services.

On the average, the marketing bills paid for farm produce by consumers surpass the farmers' receipts by about 47 percent, of which retail mark-ups constitute the largest portion. Adding quantity and quality margins and physical losses to the above price-margin results in a marketing margin up to 110.8% for the case of chinese cabbage.<sup>7</sup>

As discussed earlier in Chapter III, nowadays the market share of agricultural produce by periodic markets becomes less impressive compared with the past performance when relatively poor access to urban centers and low level of cooperative market-

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7 S.H. Kim, Towards Modernization of Agricultural Marketing System in Korea, Chung-Ang University, August, 1979 pp. 99 and 141.

ing was prevalent. And yet, the marketing bills generated in the collecting stage at farm and primary market account for about 30% of total margins depending by commodities (see Table 3).

Table II-3. Marketing Margins of Major Farm Produce by Marketing Stages, 1979

(As % of farmer's price received)

Classification	Apple	Peach	Chinese Cabbage	Yellow Mellon	Garlic	Red Pepper
Total Margin	61.2	76.6	110.8	87.2	45.1	44.5
Collecting Point	20.7	20.5	29.3	27.5	14.8	13.2
Wholsaling Stage	18.5	23.3	36.8	24.2	16.3	17.1
Retailing Stage	22.0	30.8	44.7	35.5	14.0	14.2
Physical Costs	47.4	59.9	90.2	68.8	34.0	26.9
Middlemen Profits	13.8	14.7	20.6	18.4	11.0	17.6

Source: S.H. Kim, Towards Modernization of Agricultural Marketing System in Korea, C.A.U., 1979, P. 143

Assembling function at the producing areas, whether in periodic market or not, is left upon largely in the hands of private merchants, namely, assembler and shipper. It is at this stage that cooperative marketing network appears to be most vulnerable as evidenced by the above figure. Small-scale peddlers and collectors buy fresh produce from farmers. Shippers usually buy from these merchants or directly purchase fruits and vegetables in the field. Large-scale farmers often ship their product to consignee-dealers in urban wholesale market, usually tied to credit advanced from the dealers prior to 3-5 months of production. However, in the areas of commercially-growing fruits and high value vegetables, farmers organize themselves into either a purely private marketing association or the government-sponsored horticultural cooperative unit for the organized orderly marketing of perishables.

Whether or not merchant-middlemen are exploiting farmers and consumers in terms of large margins has not been well documented. Government officials persistently claim that the relatively low rate of receipts of farmer-shippers are largely due to large profits taken by middlemen by means of monopolistic cum monopsonistic conducts, collusion, misquoting of prices, short-weight (quantity margin) and down-grading (quality margin). As seen in Table 3, the middlemen-merchant's profits to total margin are far less than one third, indicating that physical distribution costs push up the general marketing bills.

Thus, so far as marketing fees and commissions charged by middlemen are concerned, they cannot be blamed only as an intolerable profit-taker, taken into consideration that virtually no assistance at all is provided in reducing their marketing costs, especially for lowering high infrastructure cost and financial burdens. The breakdown of marketing margins made by various researchers support this argument. Most research findings attributed that reason to the malfunctioning of public services facilitating the low-cost and smooth physical distribution system.

#### Supporting Services

According to the Census Survey, within a one Kilometer of a periodic market, often found available public agencies are county or subcounty (town) agencies rural guidance office, a county or town cooperative office, (commercial bank) post office, telephone office, police station or police boxes, fire station, railway station and/or bus terminal, and cooperative sales centers. There are also mills, slaughter house, hire-delivery trucks and pickups, tearooms, theater, inns, billiard halls etc. in the same radius. Thus, on the average, a periodic market has access, within a radius of 1 Kilometer, to 7.3 units of public agencies, 38 units of market-supporting facilities, 41.1 units

of amenities.

Despite the above impressive statistics, it is generally admitted that assembling functions in rural producing areas appears to be most vulnerable to fostering on orderly and efficient marketing system. Grading, packing, price information and financing are very poor at this marketing level. Although improved packing, grading and standardization are partially being practiced by cooperatives in their own marketing centers, most perishable commodities arrive in market centers ungraded, badly sorted and improperly packaged. Market news provided by civil and cooperative agencies are based on the bewildering weights and measures, grades and sizes, causing inaccurate price quotations or even not-applicable in certain areas. This situation underlines the confidence of buyers, weakens sample buying and causes quick deterioration of the produce.

A set of practical weighing, measuring and grading standards with adequate market intelligence services need to be setup on the consensus of all parties related. Marketing inspection and outlook services which are the responsibility of the governments, are existent except for exports and imports and governmental purchases. This and appropriate agricultural outlook system are apparently weak points in the present marketing system, too.

At the village level proper shipment facilities and services as well as market intelligence activities are definitely short. The relatively well developed local road network constructed during the past five years under Saemaul Movement has largely put an end to excessive losses of produce and reduction of quality during transport to market. However, substantial spoilage does occur at the village and rural market levels due to the poor infrastructural public services. The larger proportion of spoilage-loss occur especially at the rural market level, where small shops, stalls and barrow vendors still handle a large proportion of produce, which is often subject to direct sunlight and



heat, leading to excessive loss of both quality and quantity. Special attention to providing, at primarily market level, adequate physical distribution facilities such as storage, processing, transport and vertically integrated outlet such as farm (village) to urban supermarket should continue to be made.

The failure of the government through the cooperative/banking system to supply adequate production and marketing credit has seen this function shifted to local moneylenders, assembler-shippers and illegal urban quasi-wholesalers, but the majority of farmers are still held captive by the necessity to borrow the money in advance of harvest. Even though the credit tied-in to delivery of produce after harvest is provided allegedly at no nominal interest, the cost for lending money is undoubtedly recovered in various ways when the merchant-moneylender has to make payments to farmers for the delivered produce. Interest rates charged by moneylenders are 3-10% a month. Small-scale merchants and assembly-traders sometimes borrow money on a market-day interval, so-call "Chang-Byon", for which interest is charged up to 5% in five days.

Weighing, measuring and grading services are still being rendered by weighmen, so-called 'seungsoo', in most rural markets. Evidence shows that they are inevitably pushed into a position to favor the merchants in order to survive the competitive "Seungsoo" market, which is controlled by a few buyers. The survey revealed that they usually manipulated the scale or container on behalf of the merchants up to 8 percent of the unit produce without the farmers realizing this. Where the "heaped" method of grain measurement was used, this proportion of cheating increased. Grading at the rural market level of grains is very simple: there are only two grades--"good" or "not good" according to impurities and dryness and most of the farm products are graded by the latter. Undue deductions in kind were usually made whether or not the condition of the produce justified the allowance.

Also, through the collusion of these "Seungsoo" and merchants, daily prices could be bid down since no adequate information on farm prices are readily accessible to farms, except to these weighmen in the market.

Admittedly, the traditional marketing system for farm produce in Korea has undergone a rapid evolution during the past decade. Until the early 1960's, farmers used to cultivate mainly the staple grains such as rice and barley for family consumption and the limited surplus was assembled by assembler-shippers who in many cases were either themselves a source of production credit or who had ties with merchant-moneylenders at the urban wholesale market. Wholesale markets in urban centers were small in size and handling simple varieties of staple agricultural products. In cities, retail markets either public or private were active for the marketing.

The present marketing system for farm fresh produce differs significantly from 15 years ago. The majority of shipments to expanded urban wholesale markets now are made directly by farmers, either acting as individuals through village shipping associations, or through special and district cooperatives. There is an indigenously adapted system of wholesale marketing, which is, however, dominated by unlicensed and uncontrolled wholesalers (about 60-70% of market shares) known in Korea as quasi-wholesalers or consignment wholesalers. Competing with this quasi-wholesale market are the so-called public wholesale market and the cooperative (NACF) marketing center, where auction sales are being practised. Supermarkets and chain stores have recently shown a rapid growth in most urban centers; i.e., in Seoul alone with about 350 stores active.

Yet the public laws and rules still are confined largely to statutory and regulatory market administration in urban centers other than marketing development oriented programs in collecting areas. Rural market agencies are presently in the position to

be told of many not-to-do than of what will be facilitated by the public sector. Alongside general economic and marketing development, progressive rules and regulations with marketing development in rural markets should be phased-in.

#### VII. SUGGESTIONS FOR IMMEDIATE AND INTERMEDIATE TERM IMPROVEMENTS OF RURAL PERIODIC MARKETS

In attempting to draw useful lessons for further improvements, economic dynamics in the development process of agricultural marketing structures has to be clearly understood. The marketing structure develops hand in hand with improvements in the production and consumption structure, in line with changing overall economic development in the nation. Therefore, marketing problems to be tackled exist in every stage of economic development, though the nature might be different with each other.

At the economic development stage of rapid urbanization/industrialization, the rural periodic market has shown a tendency of more consumer-oriented than being an agricultural assembly point, and the daily market components grow larger and larger.

It may be, therefore, reasonable to hypothesize that as agricultural production becomes more and more market-oriented, the marketing structure will adjust, although a lag may be present, to the changes in farming and vice versa. The present semi-subsistence marketing system in the developing country like Korea may be reasonably well adapted to its semi-subsistence farming structure in a certain stage of economic development.

To aid development, those who are responsible for policy formulation should examine means of working within and through the present (equivalent) marketing system rather than look for a substitute at the different stage of economic development, and should try to simultaneously meet all problems either in production or marketing and consumption. Best improvements in the present marketing system can come through an indirect approach.

ach fostering better marketing methods, better storage and transportation facilities, education and training of agents to better opportunities, quick and accurate market intelligence services, and well-coordinated institutional developments. Direct government intervention in the market systems operation would be the last resort to depend on, if the orderly and efficient marketing structure is to effectively induce the continuously increased volume of agricultural flows from the producer to the consumer.

The major direction for the improvement in Korea at this developmental stage is introduction of modern retailers as well as vertical coordination of farm-to-retailer marketing activities.<sup>8</sup> For this purpose, it is necessary to develop large-scale retail outlets equipped with modern management techniques in urban/rural centers as well as organize group marketing activities for the small farmers in rural production areas. The government's financial and technical assistance in this direction is a necessary stimulus to encourage such development. Bulk and group orders, handling and transportation between producer-retailer and/or wholesaler-retailer will certainly reduce the overall marketing costs.

The strong concentration of marketing from the village level and the coordination of marketing activities among producers or between producer and retailer groups might be a good incentives for farmers to concentrate and standardize their products. The grouping of farmers in line with their specialization of production has been greatly encouraged by the concentration in agricultural marketing.

Some suggestive ideas with respect to rural periodic market development are listed below.

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8 C.Y. Lee, "Improving National Marketing Systems for Economic Development," the 5th World Congress on Marketing, New Delhi, 1976.

- i) After classifying the existing markets into the two categories, that is, consumer-oriented one and rural producer-oriented one (based upon the marketing ratios of characteristic commodities handled and per km<sup>2</sup> volume of trade in rural markets), relevant policies and programs for market development are to be executed. As a result, certain markets may be accelerated to transform into daily retail market for rural-urban consumers, while others may need to be emerged into an economically viable assembly cum consumption market in rural settings.
- ii) The actual management of general periodic market together with livestock market may be integrated into one agency. Agricultural cooperatives, which presently manage more than 481 livestock markets in Korea, may take over adjacent ordinary periodic markets to enhance effectiveness of the current cooperative marketing programs.
- iii) The central government as well as lower-echelon governments should be reorganized to strengthen their respective marketing administration. Laws and regulations need to be adjusted to lead the changes in marketing development. At the same time, national as well as regional/city planning scheme must incorporate the market modernization plan in itself.
- iv) Marketing support facilities and activities should be strengthened in close connection with existing physical distribution systems in rural-urban centers towards a direction for producer-retailer/consumer integration.
- v) The importance of improving the marketing information system together with remunerating weighting-measuring-grading services cannot be too much emphasized. Government-sponsored independent Market News Agency with nation-wide service network needs to be set-up in the nearest future.
- vi) Merchants active in the periodic market may be recalled for registration to the new management for the dual purposes:

rendering effective educational programs as well as effective control and supervision of fair marketing activities.

- vii) A mid-term Rural Market Improvement Programs for about 410 progressive and viable rural markets in the nation with permanent market buildings, warehouse, storage, processing and transport equipment should be planned in an attempt to accelerate converting into effective daily marketing functions.
- viii) Because of rapid changes and increasing complexities associated with a dynamic marketing system, governments as well as research institutions should be intensifying various programs for changes in institutions and redirection of public policies and programs, thereby to strengthen their facilitating services including education and training of marketing agents.

## APPENDIX TO CHAPTER TWO

### 1. Statistical Tables

### 2. Rural Market Linkage Map and Typical Layout of Market

Annex Table 1. Distribution of Daily, Periodic and Modern Shopping Markets in Korea, 1978

Province	No. of Daily Market			No. of Periodic Markets	Shopping Centers			Total Size		
	Public	Private	Subtotal		Shopping Center	Dept. Store	Subtotal	No. of shops	Site Area (pyong)	Bldg. Area (pyong)
Seoul	-	296	296	-	57	10	67	39,690	326,602	361,983
Busan	5	78	83	-	20	6	26	12,243	81,359	67,956
Gyeonggi	7	67	74	78	5	9	14	12,906	237,084	111,579
Gangweon	14	10	24	73	-	-	-	3,644	216,471	78,395
Chungbuk	10	3	13	68	1	-	1	6,633	106,250	28,701
Chungnam	4	29	33	103	10	1	11	13,578	276,942	60,740
Jeonbuk	7	4	11	63	-	-	-	7,548	126,594	25,766
Jeonnam	14	22	36	144	3	1	4	10,076	427,608	53,899
Gyeongbuk	11	80	91	213	5	12	17	26,637	534,157	544,480
Gyeongnam	19	32	51	172	1	2	3	18,051	300,341	83,343
Jeju	6	6	12	20	-	3	3	2,084	21,464	7,549
Nation	97	627	724	934	102	44	146	153,090	2,649,871	1,424,392

Source: MOCI, 1979



Annex Table 2. Classification of Rural Markets by Market Day Schedule<sup>1)</sup>

Province	12 days per month (2 Five-Day Cycle)	6 marketing days per month (5-day Cycle)						Irregular marketing days
		1st & 6th day	2nd & 7th day	3rd & 8th day	4th & 9th day	5th & 10th day	Subtotal	
Gyeonggi	-	21	21	23	17	19	101	-
Gangweon	-	15	14	18	17	18	82	-
Chungbuk	1	15	14	15	14	15	73	-
Chungnam	-	24	24	20	29	21	118	-
Jeonbuk	-	17	13	13	16	17	76	-
Jeonnam	2	31	28	35	26	29	149	4
Gyeongbuk	1	43	34	51	42	48	218	-
Gyeongnam	-	40	40	38	42	44	204	-
Jeju	0	4	4	4	3	3	18	-
Nation	4	210	192	217	206	214	1,039	4

1) From the total 1,047 periodic markets which count OPLM as one, 4 daily livestock markets in Seoul and Busan are excluded.

Source: S.H. Kim, Census Survey Report, 1977

Annex Table 3. Market Dependent Areas Population and Market Sales by Province, 1975.

Province	No. of Markets Excl. IPLM	No. of Villages		Dependent area (Km <sup>2</sup> )		No. of households	
		Total	per Market	Total	Per Market	Total	Per Market
Gyeonggi	96	6,868	71.5	10,085.93	105.06	461,842	4,811
Gangweon	74	6,063	81.9	15,506.85	209.55	276,259	3,733
Chungbuk	73	5,607	76.8	7,282.25	99.76	221,751	3,038
Chungnam	117	8,054	68.8	8,585.87	73.38	422,216	3,609
Jeonbuk	74	6,796	91.8	7,886.28	106.57	334,459	4,520
Jeonnam	153	9,095	59.4	11,695.53	76.44	533,351	3,826
Gyeongbuk	126	10,722	70.1	19,226.53	125.66	585,434	3,826
Gyeongnam	197	8,889	45.1	11,365.83	57.69	428,446	2,175
Jeju	18	447	26.5	1,567.68	87.09	62,040	3,447
Nation	1,018	62,571	61.5	93,202.74	91.55	3,325,798	3,267

Source: Sung-Hoon Kim, All Korea Rural Market Survey Report, 1977

Annex Table 3. Continued from the Preceding Page

Province	Population		Sale Proceeds per Market day		Annual Proceeds per market	Annual Per Km <sup>2</sup> Sales
	Total	per Market	Total	per Market		
-----1,000 won-----						
Gyeonggi	2,338,605	24,360	30,083,520	4,291.1	315,250	2,983
Gangweon	1,444,304	19,518	23,263,380	4,106.4	299,767	1,500
Chungbuk	1,223,779	16,764	26,661,790	5,003.2	365,234	3,661
Chungnam	2,344,017	20,034	41,716,850	4,884.2	356,547	4,859
Jeonbuk	1,872,746	25,307	30,719,620	5,686.7	415,129	3,895
Jeonnam	2,945,424	19,251	55,737,900	4,990.4	364,299	1,766
Gyeongbuk	3,111,820	20,339	75,898,080	4,813.4	351,378	3,948
Gyeongnam	2,269,898	11,522	67,785,730	4,713.6	344,093	5,964
Jeju	276,722	15,373	5,123,016	3,898.8	284,612	3,268
Nation	17,827,315	17,512	353,500,500	4,756.8	347,246	3,793

Annex Table 4. Average Number of Merchant-Dealers per Periodic Market by Province  
(Excl. Livestock Dealers)

Classification	Gyeonggi	Gangweon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jeju	Nation
Foodgrains	18.4	15.1	16.5	20.6	15.5	23.3	18.7	16.4	21.7	18.6
Fresh & Special Produce	24.7	20.8	23.6	32.4	27.9	28.3	30.4	25.3	28.2	28.1
Fishery Products	15.3	15.4	13.8	20.3	15.0	23.2	18.1	18.0	14.2	18.1
Farm Inputs	10.4	8.0	12.4	12.2	9.7	10.8	9.9	9.1	9.9	10.4
Daily & Household Goods	80.8	62.5	75.5	109.6	79.7	98.0	99.1	86.2	49.8	88.7
Dealers Per Market	149.6	121.8	141.8	195.1	147.8	183.6	176.2	155.2	123.8	163.9

Annex Table 5. Average Number of Merchant-Dealers Per Periodic Market by Volume of Trade  
(Excl. Livestock Dealers)

Classification	LT One million won	₩1-2.5 million	₩2.5-5 million	₩5-7.5 million	₩7.5-10 million	Over 10 million won	Dealers Per Market	Ratio (%)
Foodgrains	7.4	13.2	21.1	36.9	34.0	54.2	18.6	(11.4)
Fresh & Special Produce	9.1	21.4	32.1	49.7	70.3	85.4	28.1	(17.1)
Fishery Products	7.2	12.2	22.7	29.9	37.5	51.2	18.1	(11.0)
Farm Inputs	4.6	7.6	12.8	14.5	24.7	25.7	10.4	( 6.4)
Daily & Household Goods	21.3	45.1	90.0	143.1	239.4	488.0	88.7	(54.1)
Dealers Per Market	49.6	99.5	178.7	274.1	405.9	704.5	163.9	(100.0)

Annex Table 6. Sales Points of Farm Produce and Purchasing Places

i) Sales Points

Farm Products	5-day Market	Coops. & Gov't	Local Buyers	Urban Centers	Total
Food grains	30.3%	46.7%	18.9%	4.1%	100.0%
Fresh Produce	60.4	14.5	19.1	6.0	100.0
Special Crops	70.6	8.5	18.7	2.2	100.0

ii) Purchasing Place for Farm Uses

Commodities	5-day Market	Coops	Local Merchants	Urban Centers	Total
Daily Food	85.1%	9.0%	4.5%	1.4%	100.0%
Seeds & Chemicals	28.0	50.9	16.1	5.0	100.0
Farm Equipment	50.2	24.7	19.3	5.8	100.0
Clothes & Shoes	58.8	19.2	14.4	7.6	100.0
Matrimonial Goods	9.8	3.8	11.9	75.2	100.0
Electric Goods	11.6	32.5	25.7	30.2	100.0

Source: Case Study of Rural Marketing (S.H. Kim)

(Unit: 1,000 won per Market Day)

Classification	Gyeonggi	Gangweon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jeju	National
Foodgrains	1,687.9 (39.3)	1,705.9 (41.5)	1,975.8 (39.5)	1,929.6 (39.5)	2,215.6 (39.0)	2,055.5 (41.2)	1,844.5 (38.3)	1,784.8 (37.9)	1,507.8 (31.7)	1,895.1 (39.8)
Fresh & Special Produce	563.2 (13.1)	504.0 (12.3)	813.3 (16.3)	690.1 (14.1)	700.9 (13.9)	547.7 (11.0)	880.9 (18.3)	732.5 (15.5)	542.8 (13.9)	657.7 (13.8)
Fishery Products	382.3 ( 8.9)	226.1 ( 5.5)	281.8 ( 5.6)	407.5 ( 8.3)	477.0 ( 8.4)	499.0 (10.0)	450.4 ( 9.4)	428.6 ( 9.1)	284.1 ( 7.3)	408.5 ( 8.6)
Farm Inputs	320.3 ( 7.5)	201.0 ( 4.9)	261.7 ( 5.2)	392.7 ( 8.0)	323.7 ( 5.7)	256.5 ( 5.1)	267.5 ( 5.6)	264.9 ( 5.6)	287.8 ( 7.4)	271.0 ( 5.7)
Household Goods	1,337.6 (31.2)	1,469.4 (35.8)	1,670.6 (33.4)	1,464.3 (30.0)	1,979.5 (33.1)	1,631.7 (32.7)	1,470.1 (30.5)	1,502.8 (31.9)	1,276.3 (32.7)	1,524.5 (32.0)
Per Day	4,291.3	4,106.4	5,003.2	4,884.2	5,686.7	4,990.4	4,813.4	4,713.6	3,898.8	4,756.8
Total										
Annum	313,370	314,370	365,230	356,550	415,130	364,300	351,380	344,090	291,180	347,250

\* Figures in parentheses denote ratios to total per day sales.

Source: S.H. Kim op. cit., 1977

Annex Table 8. No. of Ordinary Periodic Markets Indicating Changes in Trading Volume

Classification	LT 1 mill. won		W1-2.5 Mill.		W2.5-5 Mill.		W5-7.5 mill.	
	No.	Ratio	No.	Ratio	No.	Ratio	No.	Ratio
Increasing	58	25.6	109	40.4	132	61.7	43	58.9
Decreasing	35	15.4	21	7.8	8	3.7	2	2.7
Stagnant	134	59.0	140	51.9	74	34.6	28	38.4
Total	227	100.0	270	100.1	214	100.0	73	100.0

Classification	W7.5-10 Mill		Over 10 Mill		Nation	
	No.	Ratio	No.	Ratio	No.	Ratio
Increasing	26	68.4	33	78.6	411	46.6
Decreasing	0	0	1	2.4	67	7.6
Stagnant	134	31.6	8	19.1	404	45.8
Total	38	100.0	42	100.0	882	100.0

Source: S.H. Kim, op. cit., 1977

Annex Table 9. Distribution of Ordinary Periodic Markets by Having or Having-not Permanent Store-Buildings

Classification	Gyeonggi	Gangweon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jeju	Nation
Markets with Simple sheds	12 (22.6)	6 (11.8)	6 (15.0)	30 (31.3)	30 (46.9)	35 (27.0)	40 (24.0)	40 (25.2)	4 (23.5)	203 (26.1)
Markets with Permanent Stores	10 (18.9)	18 (35.3)	14 (35.0)	5 ( 5.2)	3 ( 4.7)	6 ( 4.6)	31 (18.6)	13 ( 8.2)	3 (17.7)	103 (13.8)
Mixed	31 (58.5)	27 (53.0)	20 (50.0)	61 (53.5)	31 (48.4)	89 (68.5)	96 (57.5)	106 (66.7)	10 (58.0)	471 (60.1)
Total No.	53	51	40	96	64	130	167	159	17	777
Ratio (%)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

Source: S.H. Kim, op. cit., 1977



Annex Table 10. Percentage Lot Area Distribution of Ordinary Periodic Markets by Commodity and Trade Volume

Market Day Trade Volume	Food grains	Veg.	Fruits	Special	Fishery	Textiles	Daily Goods	Farm inputs	Others	Total
LT W million	21.0%	11.7%	7.3%	7.0%	12.3%	20.7%	20.0%	7.2%	10.0%	100.0%
W1-2.5 Mill.	20.1	11.2	6.8	7.9	11.6	16.7	18.9	7.8	9.0	100.0
W2.5-5 Mill.	18.8	10.6	7.3	6.1	12.5	17.8	19.8	6.8	11.1	100.0
W5-7.5 Mill.	18.6	11.8	7.4	6.9	18.1	16.2	15.4	6.8	9.1	100.0
W7.5-10 Mill.	23.7	13.0	7.2	6.7	11.9	17.0	14.7	6.1	7.7	100.0
Over 100 Mill.	16.6	12.4	6.9	5.8	13.0	17.0	26.2	6.7	8.3	100.0
Average	19.9%	11.3%	7.1%	7.0%	12.2%	18.0%	19.2%	7.2%	9.6%	100.0%

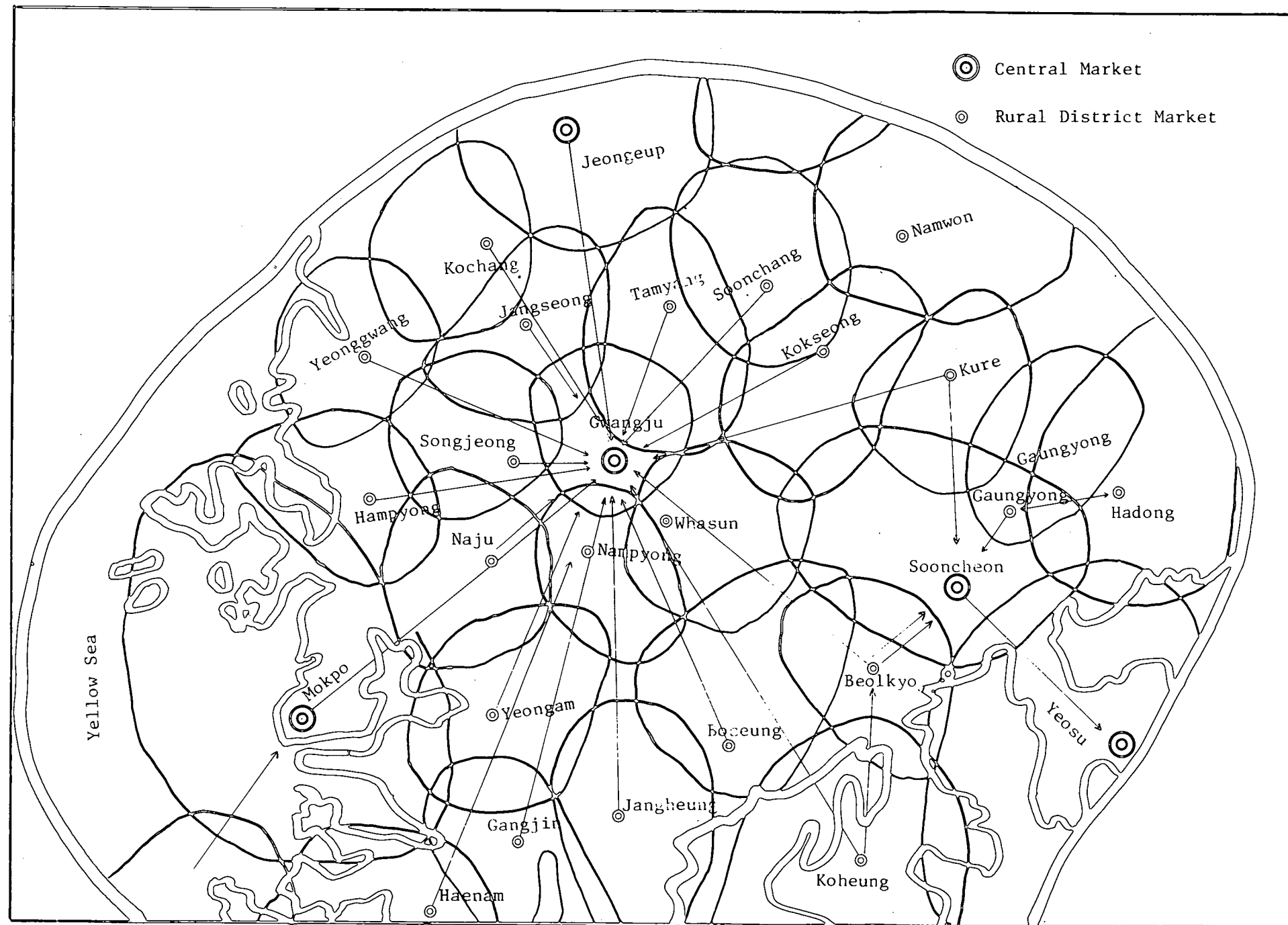
Source: S.H. Kim op. cit., 1977

Annex Table 11. Distribution of Livestock Markets and Cattle and Swine Transactions in 1978

Classification	No. of Markets	Annually Traded		Sales No. per Marketday	
		Cattle	Swine	Cattle	Swine
Nation	481	1,652,645	481,364	47.2	13.7
Gyeonggi	40	179,367	43,894	63.0	15.4
Gangweon	38	98,809	2,636	35.6	1.0
Chungbuk	42	166,724	3,580	54.4	14.2
Chungnam	49	195,937	83,485	54.8	23.3
Jeonbuk	34	118,742	63,546	47.8	25.6
Jeonnam	62	168,322	86,084	37.2	11.0
Gyeongbuk	111	420,321	48,753	41.9	6.0
Gyeongnam	91	281,524	95,218	42.4	14.3
Jeju	14	22,899	14,168	22.4	13.9

Source: NACF, 1979

Map 1. Marketing Areas and Network, Chonnam Province



MAP 2. RURAL MARKETS NETWORK, CHONNAM PROVINCE, 1975

Whasun County : 1977

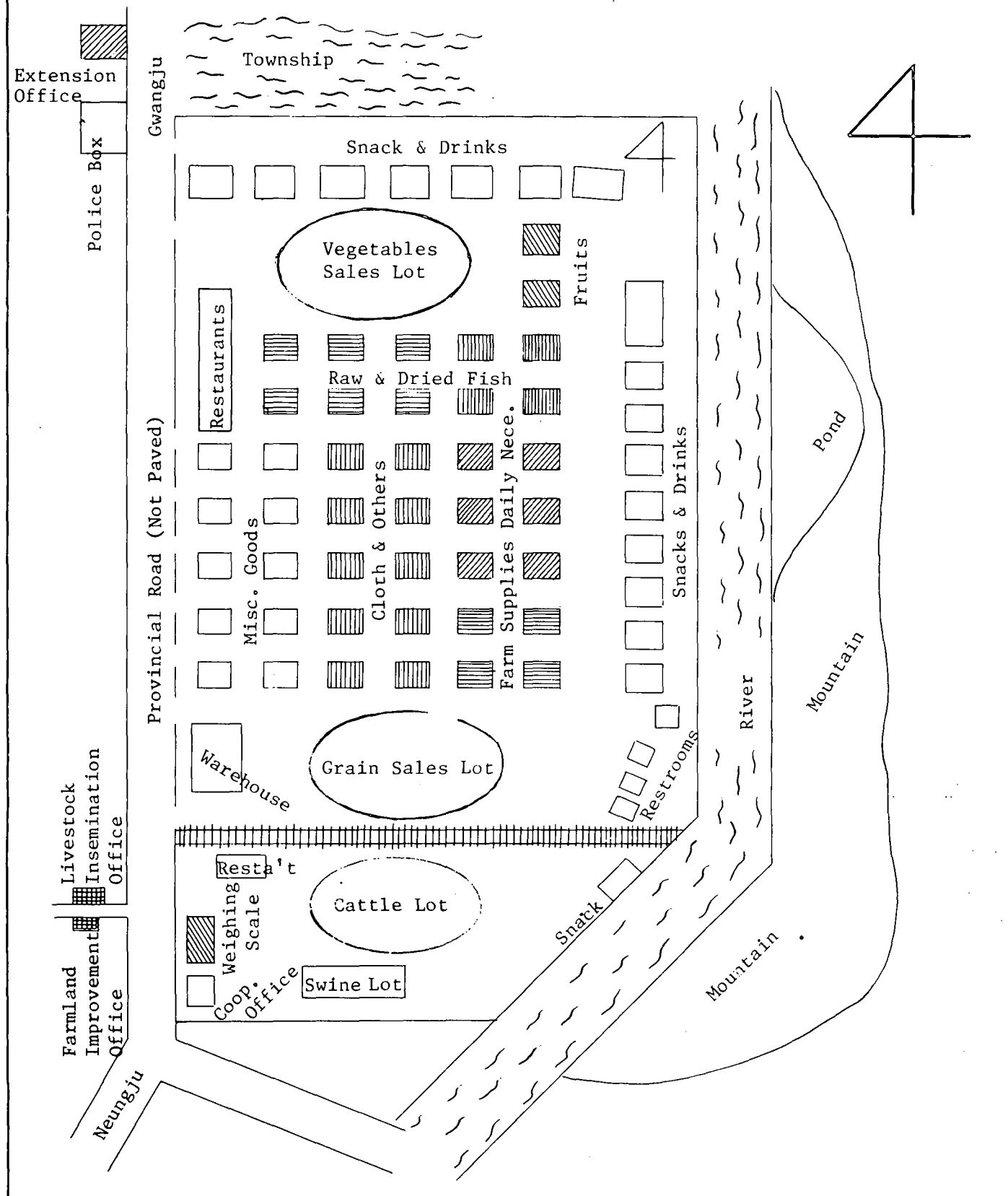
Yellow Sea

Per Day Transaction Legend

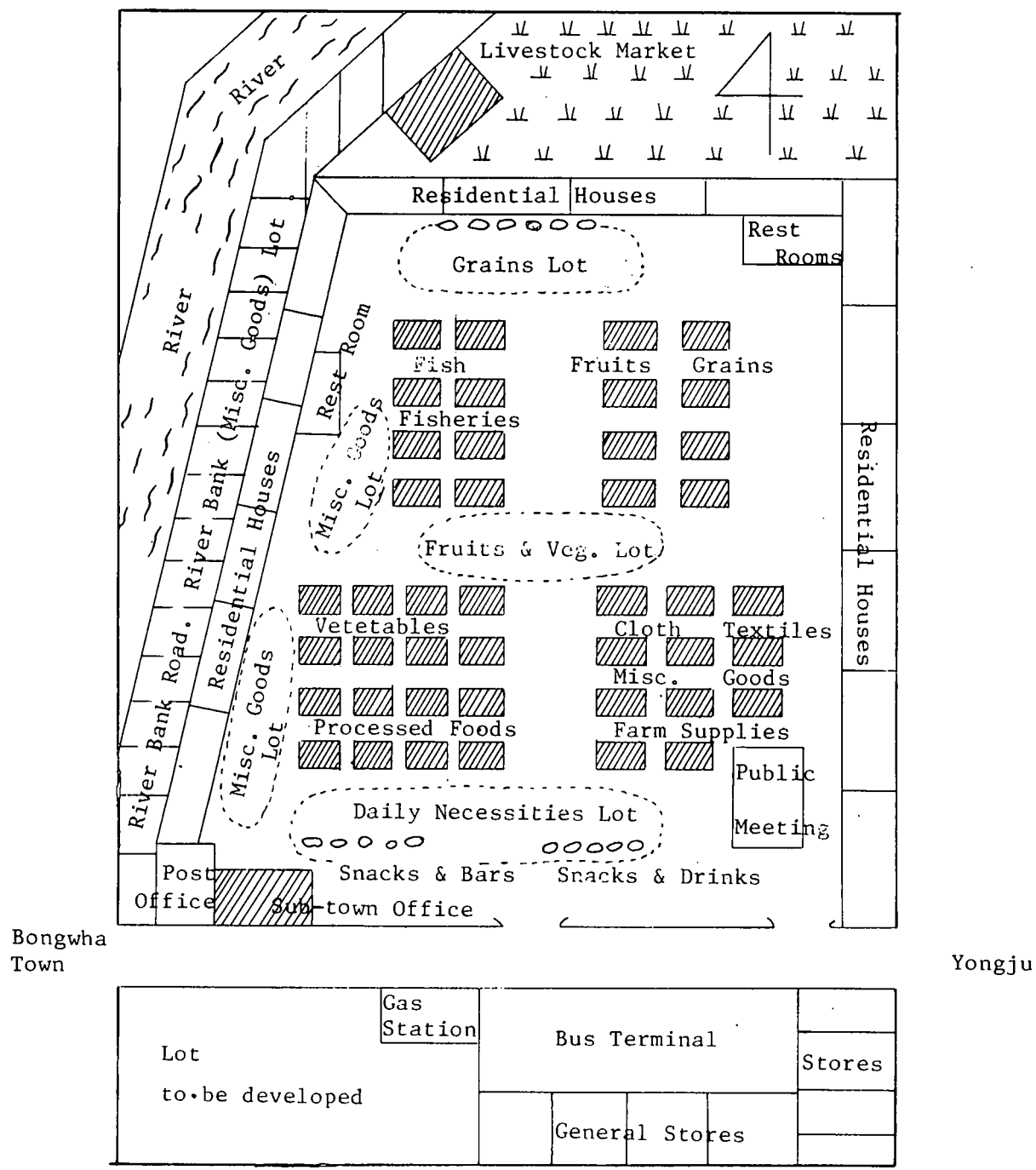
- LT 1 million Won
- ⊙ 1-5 million Won
- 5-10 million Won
- ⊙ 10-20 million Won
- ⊙ Over 20 million Won

Arabic Numbers : Market days

Map 3. Rural Market Arrangements and Layout : The Whasun District Five-Day Market



Map 4. Rural Market Arrangements and Layout : The Bongwha District 5-Day Market



## CHAPTER THREE

### IMPROVEMENT OF LIVESTOCK MARKETS

#### I. INTRODUCTION

Korean economy has been rapidly developed during a couple of decades. Income has been increased and industrialization and urbanization has been progressed. As a result, demand for livestock products has ever been increasing. Farm mechanization saves farm labor as well draft cattle services for farming.

Breeding patterns of livestock has also been changed. Almost every farm had raised a cattle and several hog. But now large scale of pasture has been developed and farmer's breeding objectives are changed from draft and self-consumption to commercial profit.

As pattern of consumption and supply has been changed, the channel and activity between producers and consumers, and marketing of livestock is and should be changed.

Livestock markets are generally established in rural areas. These markets play roles in transaction of livestock for breeding, and collection and transmission of livestock to be slaughtered for consumption.

Increase in efficiency of livestock marketing through reduction of marketing costs raises farm income and reduces consumer price. Efficient marketing system can be achieved through much effort of development program which could be established by finding problem and determining effective solutions.

The main objectives of this study are:

- 1) to find out bottlenecks of existing marketing system to efficient one;
- 2) to establish practical program to overcome the bottlenecks; and
- 3) to provide basic data and criteria for future develop-

ment plan such as five-year development plan.

Overall information of livestock markets had been collected by several researches and authorities concerned. Some information of national livestock market are out of date and detail data are not available. Case survey of a medium size of market has been carry out for in-dept survey and study. Questionnaire was prepared and asked by interview with market managers, farmers, merchants, brokers and cooperative personnel. National information of livestock market will be presented and complemented by the case study.

## II. HISTORICAL EVOLUTION OF THE LIVESTOCK MARKET

Livestock market is periodic one on the every five day basis. There are six market day per month and 72 market day per annum. The livestock market has been developed with rural periodic markets. Most of rural periodic markets has livestock section. The Law of Livestock Production in 1963 specifies that livestock market be opened by city mayor or county head, and operated and managed by agricultural or livestock cooperatives. As a result, livestock market could be established in the area without periodic market, but a few of exclusive livestock market has been opened.

Livestock market as well as rural periodic market has been decreased in number. The number of livestock markets over the nation has been decreased from 667 in 1964 to 571 in 1975 and 480 in 1978 (Table III-1). The main reasons for reduction of livestock market in number is different from those of rural periodic markets. Main reason why the rural periodic market has been decreased is that periodic market becomes regular-every day markets as small towns grow into city. Rural periodic market play double roles as outlets for farm products and for non-farm products for farmers. The demand for those services increases upto requirement of daily market as urbanization is going on.



Livestock market specially cattle market remains periodic one due to little daily requirement. In addition, rural road condition connecting the market becomes better and transportation facilities have been improved. Wider availability of mass media provides market information to buyers and sellers of livestock. Livestock raising farmers are no longer visit several market on foot to find out better price for their cattle. City residents refuses to have livestock market next their houses.

Slaughtering facilities in the major cities has been much improved. Therefore, small livestock markets in remote area have disappeared and been absorbed into the next big market. Livestock market near the large cities become large in size and have adequate facilities to meet increasing demand for marketing services.

Livestocks traded in the market is regulated to be Korean cattle and its hybrid and beef cattle. In practice, hog is also traded in and outside of livestock market.

Livestocks had been mostly slaughtered by local meat shoppers, who were treated as low social class, till the Law of Processing and Packing of Livestock Product is under practice. The slaughtering houses are divided into three categories according to the facilities they have, that is, special slaughtering house, general slaughtering house and elementary slaughtering house.

Total number of slaughtering houses was 782 in 1961, 670 in 1970, and 515 in 1977. Reasons for this is the same as these for livestock market.

### III. ROLE OF LIVESTOCK MARKETS

#### 1. Livestock Market

As of the end of 1978, there are 934 of rural periodic markets, 480 of livestock markets and 355 slaughtering houses. This means that average two rural periodic markets have one livestock market and one slaughtering house. Those markets are distributed evenly over the nation, especially slaughtering facilities.

Kyongbuk and Kyongnam provinces which have many population and large area have 200 of livestock markets out of total of 480 (Table III-1).

Cattle stock at the end of 1978 accounted 1,780 thousand heads including 1,624 thousand heads of Korean cattles, 27,000 heads of beef cattles and 136,000 heads of dairy cows. Total farms raising cattle numbered about 1,190 thousand households. This means every farm has a little more than one head of cattle. While total number of cattle marketed in the livestock markets was about 2,661 thousand heads and 68 percent of those marketed 1,653 thousand heads, was actually traded. This is equivalent with average 76 heads marketed and 47 heads traded per market per market day.

Transaction volume is different among provinces from 63 heads daily per market in Kyonggi Province to 22 heads daily per market. The marketed volume of cattle is also much different from province, compared with the transaction volume. Average 104 heads per market was daily marketed in Kyonggi Province, 92 in Chungbuk Province, 90 in Kyongbuk Province, and 23 in Jeju Province (Table III-2).

The marketed volume of cattle has big difference among markets from about 38,000 head per annum to none per annum. The livestock markets are evenly distributed according to number of cattle marketed per annum upto 14,000 heads. Promotion of markets which have the marketed volume of less than 3,500 cattles was 52 percent of total number of livestock market; less than 5,000 cattles, 66 percent, and 10,000 heads, 82 percent (Table III-3). This shows that there are many small scale markets relative to the large scale markets.

The ratio of cattle sold to the marketed was approximately normally distributed by the number of livestock markets. But the range of the ratio is from 5 percent to 100 percent (Table III-4). Transaction of hog takes place in 316 livestock markets

out of total 480 markets. Average marketed and trade volumes of hog per market per day are 31 and 21 heads respectively (Table III-5).

## 2. Slaughtering Facilities

The regulated slaughtering houses are divided into three classes; that is, 46 of special slaughtering house; 148 of general one and 320 of elementary one.

The distance between two slaughtering houses is very important factor for development and improvement of the facilities of any given slaughtering house. About 62 percent of total slaughtering houses is located within 15 Km of distance among them, 84 percent, within 20 Km, and 92 percent, within 25 Km (Table III-6). The average is 14 Km of distance among them.

The capacities of slaughtering houses are very different according to classes. Average capacity of special slaughtering house is 77 heads of cattles and 161 heads of hogs per day, general one, 16 cattles and 38 hogs, and elementary one, 5 cattles and 15 hogs per day in 1977. The capacity was utilized by average of 22 percent for special slaughtering house, by 13 percent for general one and by 7 percent for elementary one. Average rate of utilization of total slaughtering capacity was only 15 percent in 1977 (Table III-7).

There are many small scale slaughtering houses. The slaughtering houses in which less than one cattles are slaughtered per day account 84 percent of total slaughtering houses, and more than 10 cattles, only 3 percent. The same is true for hog slaughtering (Table III-8).

Every slaughtering house had about 20 customers of meat shops but proportion of slaughtering houses which have less than 20 customer shops was 82 percent in 1977 (Table III-9).

In short, average capacity of slaughtering house is very small and these are many small size of slaughtering houses, but

the range of the size is very wide.

#### IV. PHYSICAL FACILITIES

##### Livestock Market

The facilities of livestock market consist of loading and unloading ramp, weighing scale, office building, large animal section with tie rails or tie stick, small animal shed, bulletin board for price information, water supply, sewage and garbage disposal facilities, inspection lot, epidemic prevention facilities, parking lot and motorcycle and transportation means.

Average market area was 766 Pyung (2,842 m<sup>2</sup>) over the nation, 1,204 Pyung in Kyonggi Province and 425 Pyung in Jeju Province. Eighty eight percent of livestock market had office building. Total building area including office was surveyed to be 52 Pyung. The market in Jeunnam and Kyongbuk Provinces had most large area of building (Table III-10). Some market has weighing scale of one or two but some market don't. Total of 480 livestock markets was equipped with 400 of weighing scales. They also have one or two motorcycle and transportation means.

Every market have amplifier system to announce market information and personal connection. The price of livestock in the last market day and carcass price in the wholesale market can be read on the bulletin board. Information of trade volume is also available. Most of market ground is unpaved but some, covered by cement. Maintenance of clean market is just right thing to be solved. Water supply and sewage facilities and garbage disposal are not in condition and should be improved in near future.

##### Slaughtering House

The physical facilities of slaughtering house include mooning house, small livestock pen, ante-mortem and post-mortem inspection room, slaughtering room, chilling and cold storage room,

weighing scale, holding and breeding facilities, viscera cleaning facilities, water tank and sewage disposal facilities. Average facilities per slaughtering house are shown in Table III-11 by classes.

## V. SUPERVISION AND ADMINISTRATION

### 1. Livestock Market

Management and supervision systems of livestock market and slaughtering house are different each other and regulated by different laws. The functions of management system of livestock market are i) administration of marketing for livestock, cattle and hog; ii) collection of transaction fee to encourage livestock breeding; and iii) mutual aid program for livestock farms.

The Law of Livestock Production specifies the following in Chapter V.

- 1) Opening of livestock market
  - a. opener - mayor and county head
  - b. permission - provincial governor including Seoul and Pusan city mayors
- 2) Conditions for permission to open the market
  - a. location and facilities not to conflict with public sanitary code
  - b. location and facilities to be adequate for livestock transaction
  - c. location to have distance of more than 12 Km from the next markets
- 3) Facilities requirements for livestock market
  - a. office and cashing facilities
  - b. mooring lot, drainage and inspection lot
  - c. epidemic prevention facilities
  - d. water supply and servage disposal
  - e. weighing scale
- 4) Market manager

The opener may entrust agricultural coop and livestock coop. With market management, and report that to Ministry of Agriculture and Fisheries.

5) Livestock which shall be trade only in the market

- native cattle and its hybrid
- beef cattle

Exception: Transaction outside market

- livestock produced in national and public breeding stock ground
- island without the market
- large scale ranch to have permission by law and regulations

6) Transaction method

Brokage and/or auction

7) Transaction certificate

Opener shall issue the certificate of traded livestock

8) Transaction fee

- a. Buyer shall pay transaction fee within one percent of total receipts of cattle and its hybrid and beef cattle.
- b. Provincial governor may set the transaction fee for other livestock.
- c. Market manager shall establish for special fund for transaction for receipts.

9) Special fund for livestock market management

Receipts: transaction fee

Expenditure Item:

- a. selection and multiplying of breed, epidemic prevention and mutual aid for livestock
- b. operation and management of livestock market
- c. improvement in facilities and transaction practice in the market
- d. other programs indicated by MAF

As the end of 1978, 48 of primary agricultural cooperatives and 89 of livestock cooperative are managing 480 livestock markets. This is equivalent that every cooperative manages average of 3.5 livestock markets. There are average of 2.3 personnel per market, including market managers, technician, and labor or guard. In addition, each market has average of 13 brokers or commission agents who go around actually two or three markets (Table III-12).

## 2. Slaughtering House

The Law of Processing and Packing of Livestock Products specifies that anyone who want to establish and operate shall get permission of Provincial Governor, and have facilities regulated by Law. Local county, coops and private firm operate 76, 8 and 16 percents of slaughtering house in terms of its number.

## VI. TRADING PRACTICE

The livestock brought to the market are passed through the weighing scale for weighing and for grading. The weight, sex and age are recorded in the tentative transfer certificate. The buyer and seller haggles for the price of animal with aid of commission agents. Now a day some market are converted from brokage market to auction market.

Auction hardly take place because of objective valuation of live animal is very difficult especially for breeding animal, and because there are no many buyers enough to compete each other. Weight is a criteria to evaluate the animal. There are many factor for evaluation such as sex, age, physical condition, external shape, native county, experience, haggling power and commission agent's ability. Auction practice can apply to a cattle and hog to be slaughtered in the large size of market in which many animals are brought in enough to acution.

As the cattle is bought, a transaction certificate is prepared by the market collector to whom the buyers pays a transaction

fee of 1.0% of total price, which includes brokerage fee of 20% in it. When the cattle bring in the market, the owner pays entrance fee according to the fee schedule set by the county head. The entrance or yardage fee schedule is a little different among markets but generally is W100 per head under age 1, W200, age 1-3 and W300, age over 3 years for cattle.

The entrance fee is collected by the county, the opener, and used as general account of the county. Total receipts of transaction fee in the livestock markets amounted W3,608,219 thousand in 1978. There were no big difference of transaction fee receipts per market among provinces except Pusan and Kyonggi Provinces (Table III-13).

The receipts of transaction fee after payment of brokerage fee are used to establish the Special Fund for Livestock Market Management which is budgeted by the National Agricultural Cooperatives Federation under permission of MAF. The expenditure of the fund during 1968-1978 was shown in the Table III-14. Major items were expenditures for facilities for artificial fertilization and livestock market.

## VII. PRICING EFFICIENCY AND SUPPORTING SERVICES

Price of cattle is formulated in the free market but price of carcass is regulated by setting the ceiling price which is hardly secured because of market competition. Seasonal price of cattle is stable along year but the price is a little high in crop growing season when demand for draft cattle is high (Table III-15).

Price variation among the neighboring livestock market could not significantly find out. Main reason for this seems that many markets compete each other in specific location. The flow animal was from farm through producing market and secondary level assembly markets to meat market. As road conditions and transportation facilities is improved, such classification as primary market and



secondary assembling market has little meaning. Total margin between prices of live cattle at farm and meat shop was survey to be only 20 percent of consumers expenditure.

Price information of carcass in the major cities and of live weight in previous market day is available to farmers who enter the market and is reported bulletin board at market office. Telephone services are also available because the market and every village has telephone facilities.

The market managing cooperatives have their own extension program on production technique and marketing arrangement.

#### VIII. MAJOR PROBLEMS AND RECOMMENDATION

First, there are many small size of livestock markets scattered over the nation. They could not utilized their full capacities and are opened every five day. It is trend to formulate secondary assembling market as marketing center in the major producing area. The market size become large enough to take advantage of economy of scale such as auction practice, operation costs and physical and supporting facilities. On the other hand slaughtering house is small size and large number, has utilization rate of capacity less than 15 percent, and is located mostly near and in the major cities.

It is recommended to establish marketing center in the major producing area along with adequate slaughtering facilities. The center provide role of leader for price formation to the neighboring markets, information about national situation of price, production, and marketing, and role of supply center of meat to reailer and big buyer in the major cities. Development of cold chain system makes it profitable to transportation carcass from the center to consuming area rather than live animals. Introduction of air-conditioned truck can save transportation space and cost of moving non-edible wastes which pollute environment of cities.

Supervision and administration system might be the same for livestock market center and its slaughtering house. The program should be planned to accelerate this trend of market center. It includes daily opening of the market center, introduction of cold chain system, moving of slaughtering house out of cities, improvement of road condition, etc. The center may be considered to be located in such as Hwengsung, Sangju, Jinju, Namwon, Seosan, Chungju, Suwon, and Jeju.

Second, much efforts have been made to improve market facilities, but still is not good conditions. Improvement of the facilities is closely related with economic size of the market and with frequency of market day. Improvement of market facilities has to be done along with increase economic size of the market. In addition, the mobility and liquidity of market facilities to meet future functions effectively are required.

Third, it is not necessary to enforce trade method into auction. If the environment for auction is ripen, the trade method will be converted from haggling into auction. The pricing efficiency depend more on market organizational factor rather than trading method.

Fourth, the supporting services for efficient marketing are easily disregarded because of their invisible effects even if it is very important. Market information system development program includes livestock and its product market information development sub-program covered over the nation.

Objective and scientific criteria for evaluation of livestock price has to be set up, including grading. The effort will be made to improve the environment condition of the market, including sewage, garbage disposal, water supply and veterinarian service. As the size of economy is growing and the same is trade for marketing, the roles of private marketing firm becomes important for the efficient marketing. The marketing firms need high level technology and operational skill which could be developed through

training and education. The man-power development and training program aim at increasing the long-term efficiency in marketing.

Korean Government already established and implemented improvement program of livestock markets and slaughtering houses. This program need not much financial contribution.

Table III-1. Number of Livestock Markets and Their Environment (1964-78)

Province	1964	1975	1976	1977	1978		
					Total Livestock Markets	Total Slaughtering Houses	Rural Periodic Market
- Livestock Market -							
Seoul	1	1	-	-	-	3	-
Pusan	3	3	2	2	2	1	-
Kyonggi	67	48	48	44	40	46	78
Kangwon	65	58	52	46	38	45	73
Chungbuk	51	50	49	46	43	34	68
Chungnam	50	51	51	50	47	45	103
Jeonbuk	45	41	42	37	37	38	63
Jeonnam	79	68	66	61	59	37	144
Kyongbuk	162	127	121	118	111	42	213
Kyongnam	129	109	102	96	89	54	172
Jeju	15	3	14	14	14	14	20
Total	667	571	541	514	480	355	934

Source: Ministry of Agriculture and Fisheries

Table III-2. Number of Cattle Marketed and Sold in 1978

Province	No. of Market	Cattle Marketed		Cattle Sold		B/A (%)
		Total(A) (1,000 head)	Per Market Day (head)	Total(B) (1,000 head)	Per Market Day (head)	
Kyonggi	39	297	104	179	63	60
Kangwon	38	143	52	99	36	69
Chungbuk	42	281	92	167	54	59
Chungnam	49	313	88	196	55	63
Jeonbuk	34	161	65	119	48	74
Jeonnam	62	259	57	168	37	64
Kyongbuk	111	726	90	420	52	58
Kyongnam	91	458	69	282	42	61
Jeju	14	23	22	23	22	100
Nation	480	2,661	76	1,653	47	68

Source: Livestock Industry Development Corporation

Table III-3. Distribution of Livestock Market by Number of  
Cattles Marketed per Annum (72 Market Days), 1978

Number of Cattle Marketed per Annum (hundred head)	Number of Market	Proportion (%)	Cumulated percent
0 - 5	43	8.9	8.9
5 - 10	48	10.0	18.9
10 - 15	31	6.4	25.3
15 - 20	32	6.7	32.0
20 - 25	36	7.5	39.5
25 - 30	26	5.4	44.9
30 - 35	34	7.1	52.0
35 - 40	19	4.0	56.0
40 - 45	22	4.6	60.6
45 - 50	25	5.2	65.8
50 - 60	21	4.4	70.2
60 - 70	18	3.7	73.9
70 - 80	13	2.7	76.6
80 - 90	13	2.7	79.3
90 - 100	14	2.9	82.2
100 - 120	23	4.8	87.0
120 - 140	20	4.2	91.2
140 - 160	6	1.3	92.5
160 - 180	7	1.5	94.0
180 - 200	13	2.7	96.7
200 - 250	11	2.3	99.0
250 - 300	1	0.2	99.2
300 - 400	4	0.8	100.0
Total	480	100.0	

Source: Computed from Livestock Industry Development  
Corporation

Table III-4. Distribution of Livestock Market by Ratio of Cattle Sold to That Marketed, 1978

The Ratio (%)	Number of Market	%	Cumulative
0 - 10	9	1.9	1.9
11 - 20	1	0.2	2.1
21 - 30	5	1.0	3.1
31 - 40	33	6.9	10.0
41 - 50	85	17.7	27.7
51 - 60	106	22.1	49.8
61 - 70	129	26.9	76.7
71 - 80	68	14.1	90.8
81 - 90	21	4.4	95.2
91 - 100	23	4.8	100.0
Total	480	100.0	

Source: Computed from Livestock Industry Development Corporation

Table III-5. Number of Hog Marketed and Sold, 1978

Province	No. of Market Where Hogs Are Sold	Hog Marketed		Hog Sold		B/A (%)
		Total(A) (head)	Per Market Day (head)	Total(B) (head)	Per Market Day (head)	
Kyonggi	24	70,302	40.7	43,894	25.4	62.4
Kangwon	2	4,199	29.2	2,636	18.3	62.7
Chungbuk	30	70,315	32.6	43,580	20.2	62.0
Chungnam	45	118,253	36.5	83,485	25.8	70.7
Jeonbuk	29	86,405	41.4	63,546	30.4	73.4
Jeonnam	56	127,076	31.5	86,084	21.4	67.9
Kyongbuk	47	70,109	20.7	48,753	14.4	69.6
Kyongnam	69	135,640	27.3	95,218	19.2	70.3
Jeju	14	14,188	14.1	14,168	14.1	100.0
Nation	31.6	696,487	30.6	481,364	21.0	69.1

Source: Computed from Livestock Industry Development Corporation

Table III-6. Distance among the Slaughtering Houses, 1977

	Less than 5 Km	6-10	11-15	16-20	21-25	More than 25 Km
Number of Slaughtering houses	47	115	159	112	43	39
%	9.1	22.3	30.9	21.8	8.3	7.6
Cumulative %	9.1	31.4	62.3	84.1	92.4	100.0

Source: MAF

Table III-7. Slaughtering Capacity and Its Utilization in 1977

Classification	Slaughtering Capacity per Day		Auctual Slaughtering		Rate of Utilization	
	Cattle	Hog	Cattle	Hog	Cattle	Hog
	(head)	(head)	(head)	(head)	(%)	(%)
Special	77	161	15.9	37.5	21	23
General	16	38	2.2	5.0	14	13
Elementary	5	15	0.3	1.0	6	7
Average	15	35	2.3	5.5	15	16

Source: MAF

Table III-8. Distribution of Slaughtering Houses by Number of Livestock Slaughtered per Day in 1977.

No. of Livestock Slaughtered	Cattle			Hog		
	No. of Slaughter- ing Houses	%	Cumula- tive %	No. of Slaughter- ing Houses	%	Cumula- tive %
more than 100 head	3	0.6	100.0	7	1.6	100.0
50 - 100	1	0.2	99.4	2	0.4	98.4
30 - 50	3	0.6	99.2	8	1.6	98.0
20 - 30	4	0.7	98.6	14	2.7	96.4
10 - 20	11	2.0	97.9	23	4.5	93.7
5 - 10	19	3.8	95.9	30	5.8	89.2
4	6	1.2	92.1	16	3.1	83.4
3	14	2.7	90.9	27	5.2	80.3
2	20	3.8	88.2	50	9.7	75.1
1	54	10.5	84.4	88	17.1	65.4
0.5	61	11.8	73.9	112	21.7	48.3
0.1	158	30.7	62.1	110	21.3	26.6
less than 0.1 head	162	31.4	31.4	28	5.3	5.3
Total	515	100.0		515	100.0	

Source: MAF

Table III-9. Number of Custom Meat Shops for Every Slaughtering Houses in 1977

	Less than 3 Customers	4-5	6-10	11-20	21-30	31-50	More than 50
Number of Slaughter- ing Houses	85	91	158	87	42	24	28
%	16.5	17.7	30.7	16.9	8.1	4.7	5.4
Cumulative %	16.5	34.2	64.9	81.8	89.9	94.6	100

Source: MAF



Table III-10. Facilities of Livestock Market in 1978

Province	Average Area per Market (pyung)	Number of Office	Building Area per Market (pyung)	No. of Weighing Scale per Market	Transportation Facilities per Market
Kyonggi	1,204	37	38	37/40	61/41
Kangwon	614	26	26	38/38	74/38
Chungbuk	755	29	32	38/43	54/43
Chungnam	837	52	59	43/47	55/47
Jeonbuk	764	31	50	32/37	12/37
Jeonnam	662	49	74	47/52	79/52
Kyongbuk	881	100	79	98/111	107/111
Kyongnam	596	86	35	57/89	80/89
Jeju	425	13	13	10/14	14/14
Nation	766	423	52	400/480	536/480

Source: NACF

Table III-11. Physical Facilities by Class of Slaughtering House in 1977

Unit: Pyung

Classification	Total Area	Mooring Pen	Livestock Inspection Room	Slaughter- ing Room	Chilling and Cold Storage	Other
Special	409	63.4	4.7	116	31	168.7
General	54.4	8.6	1.8	33	0.06	9.6
Elementary	16.5	1.5	0.3	12	-	1.3

Source: MAF

Table III-12. Livestock Market Managing Coops and Their Personnel

Dec. 1978

Province	No. of Markets	No. of Managing Coops			Personnel				Broker
		Ag. Coop.	Live-stock Coop.	Total	Ad.	Tech.	Labor	Total	
Kyonggi	40	7	11	18	35	74	30	139 (3.5)	703 (17.5)
Kangwon	38	11	4	15	18	62	39	119 (3.1)	193 (5.2)
Chungbuk	43	6	4	10	14	43	23	80 (1.9)	478 (11.1)
Chungnam	47	-	15	15	43	59	13	115 (2.4)	731 (15.5)
Jeonbuk	37	2	11	13	17	54	29	100 (2.7)	595 (16.0)
Jeonnam	59	8	13	21	41	80	17	138 (2.3)	836 (14.1)
Kyongbuk	111	10	14	24	62	101	60	223 (2.0)	1,635 (14.7)
Kyongnam (including Pusan)	91	4	16	20	56	94	26	176 (1.9)	1,023 (11.2)
Jeju	14	-	1	1	6	21	2	29 (2.1)	12 (0.8)
Total	480	48	89	137	292	588	239	1,119 (2.3)	6,206 (13.0)

Source: NACF.

Note: Number in ( ) is figure for per market.

Table III-13. Total Receipts of Transaction Fee in the Livestock Market in 1977 and 1978

Unit: 1,000 Won

Province	Transaction Fee			
	1977		1978	
	Total	Per Market	Total	Per Market
Pusan	18,824	9,412	39,664	19,832
Kyongggi	392,019	8,909.5	412,099	10,302.5
Kangwon	191,131	4,155.0	215,289	5,665.5
Chungbuk	336,483	7,314.8	382,279	8,890.2
Chungnam	344,051	6,881.0	382,148	8,130.8
Jeonbuk	223,722	6,046.5	244,199	6,600.0
Jeonnam	352,026	5,770.9	356,715	6,046.0
Kyongbuk	844,132	7,153.7	892,051	8,036.5
Kyongnam	592,402	6,170.9	619,282	6,958
Jeju	60,064	4,290.3	64,513	4,608.1
Total	3,354,854	6,527.0	3,608,219	7,517.1

Source: NACF

Table III-14. Expenditure Proportion on Supporting Projects by  
Special Return Fund to Livestock Market  
Management (1968-1978)

	Proportion
Management Cost Subsidy	8.6
Livestock Mutual and Program	2.0
Control of Unregualted Slaughtering	1.2
Experiment of Livestock Fattening by Artificial Milk	0.4
Extraction of Livestock Semen	4.3
Conserving Program of Special Dog	0.4
Other	0.3
Capitital Expenditure	91.4
Buy Motocycle	12.8
Construction and Repairement of Livestock Artificial Fertilization Center	26.4
Livestock Market Facilities	37.7
Weighing Scale	5.4
Slaughtering and Dressing Facilities	1.8
Cattle Reserve Project for Price Stabilization	1.7
Meat Marketing Center	1.3
Feed Plant	1.4
Cattle Mooring Facilities	1.0
Feed Storage Facilities	0.3
Egg Storage	0.1
Purchase of Seed Bull	0.4
Seed Bull's House	0.6
Breeding Hen's House	0.4
Beef Cattle House	0.1

Source: NACF

Table III-15. Seasonal Price Index of Cattle, Average of  
1974-1978

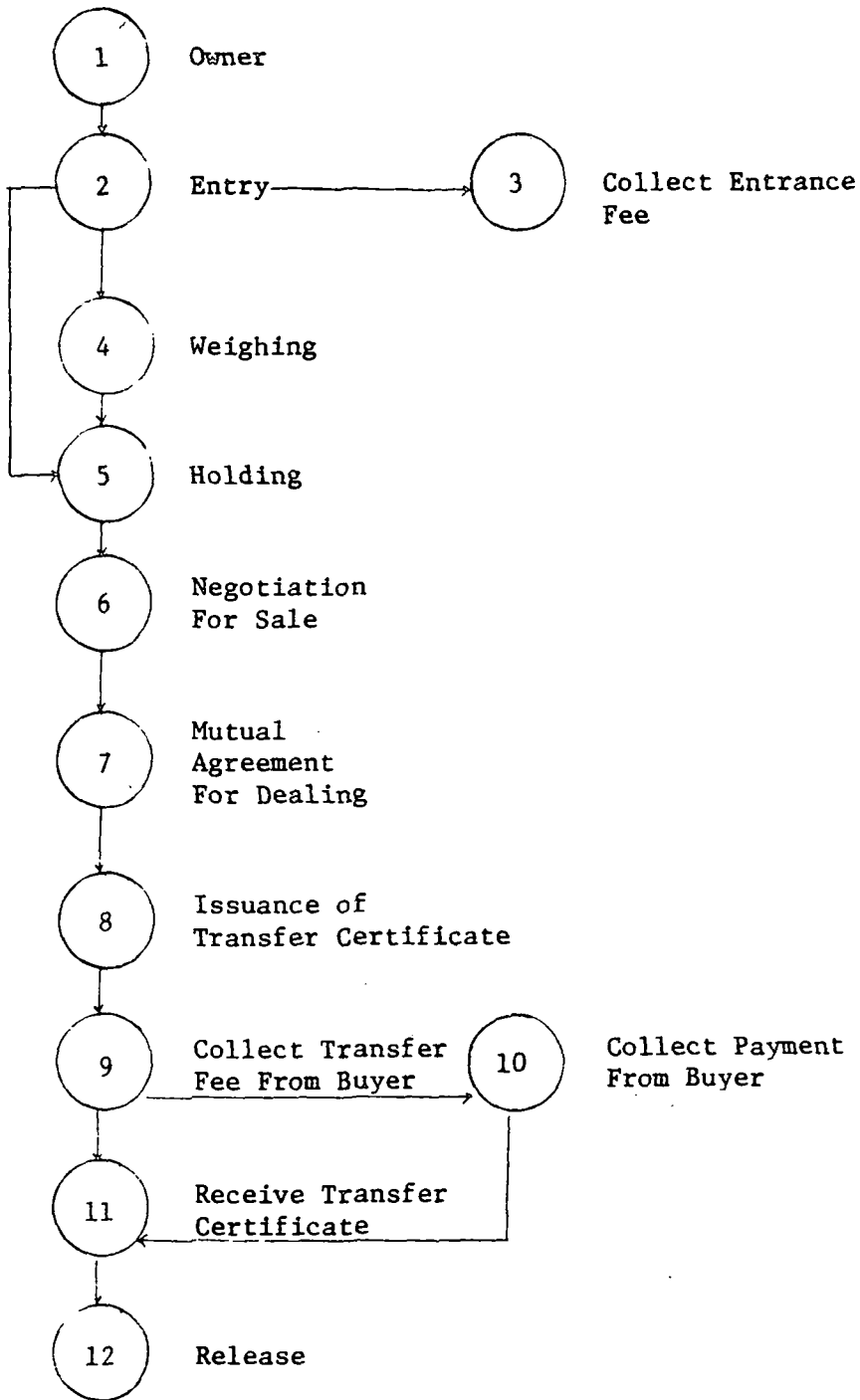
Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Price Index	97	100	102	105	104	104	103	102	99	97	95	92

Source: Computed from NACF

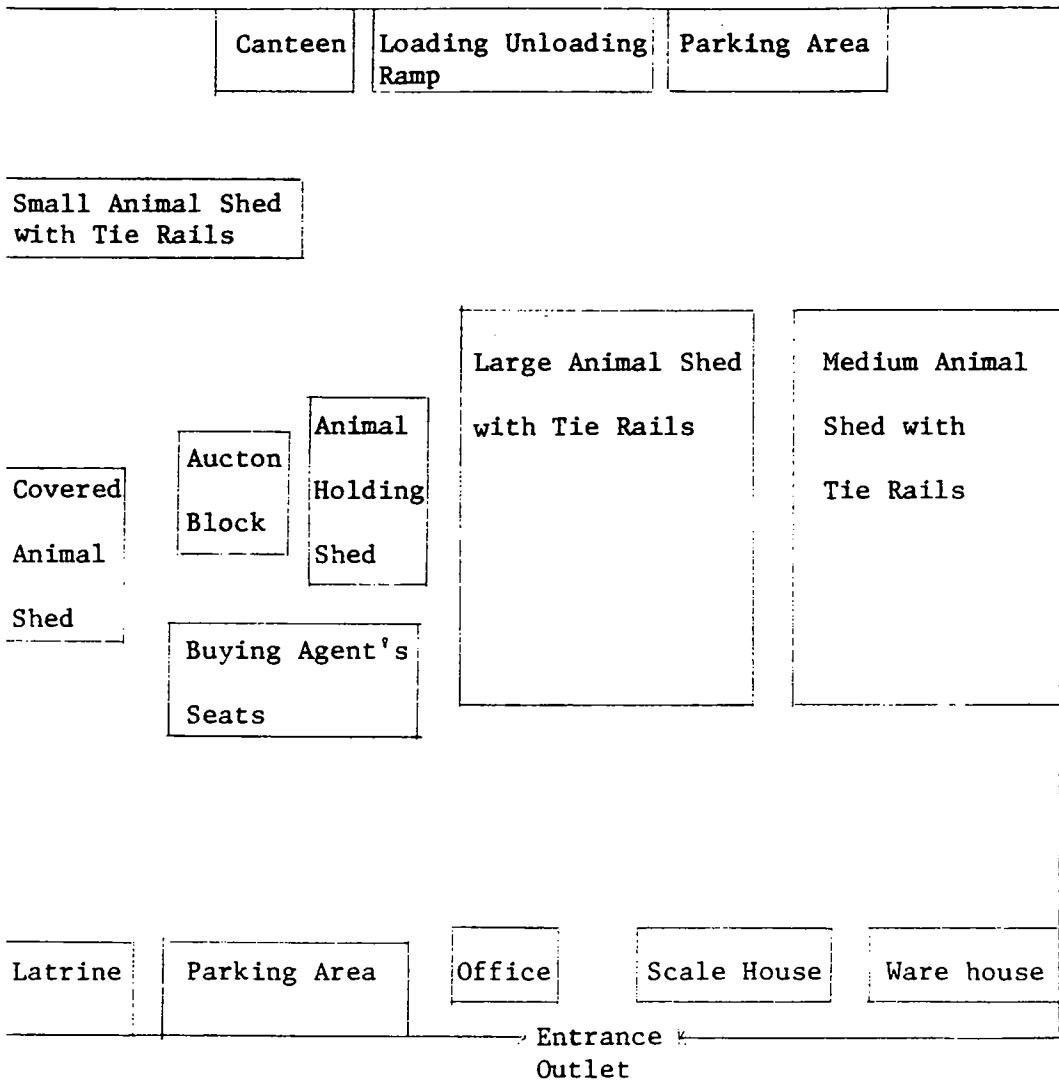
## APPENDIX TO CHAPTER THREE

1. Livestock Market Practice Diagram
2. Layout of Nam Won Livestock Market
3. Layout of Jin Ju Livestock Market
4. Korea Livestock Market Size and Flow

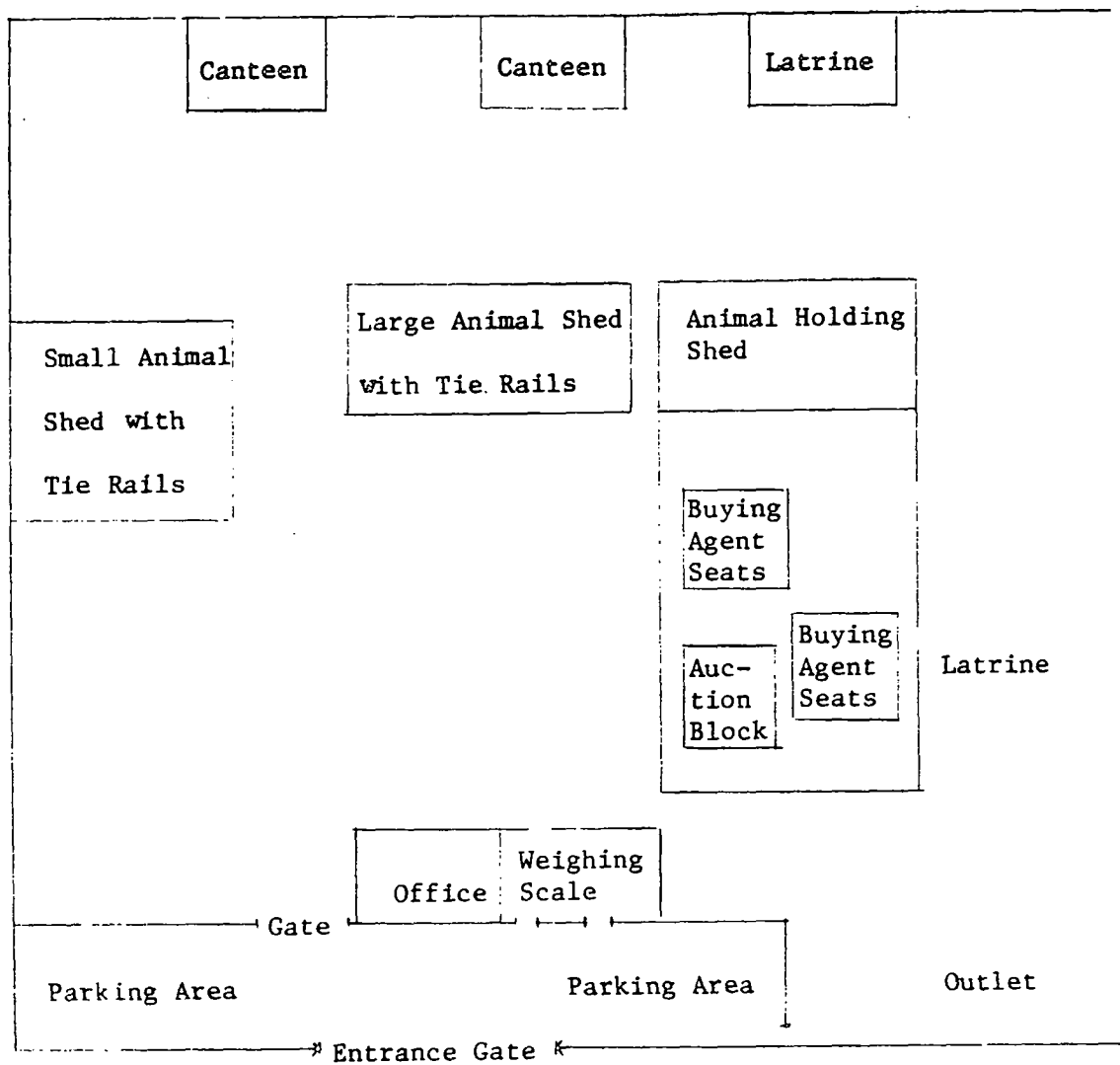
1. LIVESTOCK MARKET PRACTICE DIAGRAM



## 2. LAYOUT MAP OF NAM WON LIVESTOCK MARKET

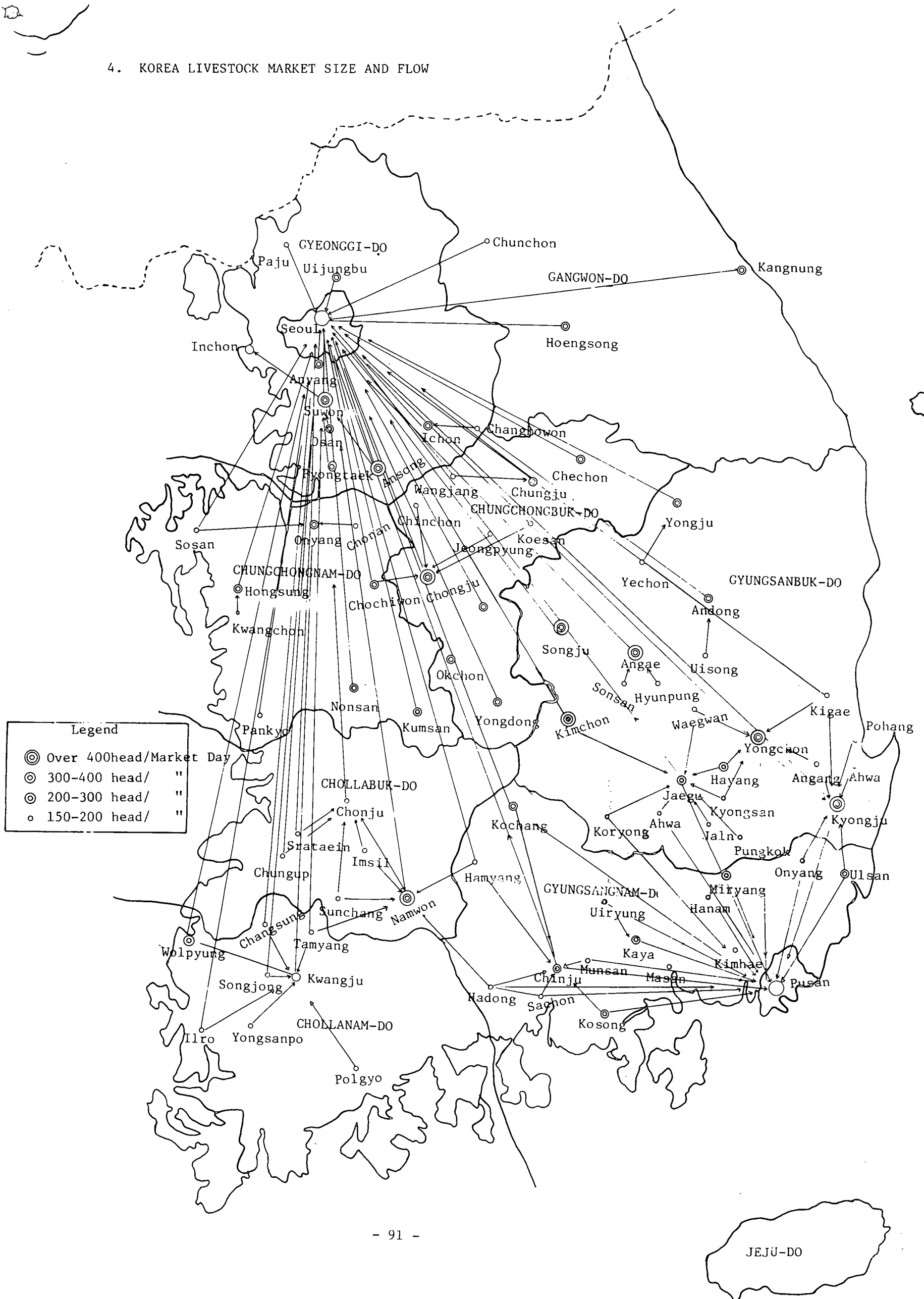


### 3. LAYOUT MAP OF JIN JU LIVESTOCK MARKET





#### 4. KOREA LIVESTOCK MARKET SIZE AND FLOW



원문누락

## CHAPTER FOUR

### IMPROVEMENT OF FISHERY MARKET IN LANDING AREA

#### I. INTRODUCTION

The fishery population has been decreased during the last decade and reached 827 thousand persons, 2.2% of total population in 1978. The share of value added in fishery industry was 2.7% of total GNP in the same year.

The demand of fishery products has been rapidly increased domestically and abroad, and per capita domestic consumption was 45Kg per annum in 1978, which was double of that in ten years ago. Average household spent 8.8% of household's food consumption expenditure for fishery food, as a major source of protein food. Korean consumers have a consumption pattern to prefer fresh fishes rather than processed one, and consume about 60% of total domestic production in from of fresh products.

The marketing system of marine products should be adjusted to meet effectively the diversified demand of the consumers for them. Increase in demand for fresh marine products requires the flow of products through marketing channels with maximum speed and at minimum cost, which in turn need reasonable standardization and adequate storage facilities.

The study aims (1) to understand current fishery marketing system in the producing area, (2) to analyze the efficiency of operation and management of the markets, (3) to find out the weakness and major problems of fishery market system, and (4) to provide recommendations about measures to solve the current and expected bottlenecks against efficient marketing system of marine products.

To fulfill the above purpose, the mail survey was conducted to obtain necessary informations from all of fishery cooperatives over the nation, which is a main channel of fishery marketing in

in the producing area. Among total of 420 local markets, 141 local markets provide responses good enough to analyze the data.

## II. ROLE OF LOCAL FISHERY MARKETS

There are 69 district fishery cooperatives in the seaside counties, 15 special cooperatives classified by fishing method and total of 119 thousand members of them (Table IV-1).

The cooperative's markets at landing port consist of three categories; (1) county fishery cooperative's markets which include 149 consignment markets, 266 Coop. branch markets and 2 marketing centers at landing areas, (2) National Federation of Fishery Cooperative's Marketing Centers which are only two in number, and (3) a Pusan Fishery Market Corporation under supervision of Office of Fisheries.

In addition, there are seasonal markets for cultivated marine products and the like. Total numbers of markets, daily and seasonal, is 598 in the producing area.

Most of fishery markets in landing area have landing oiling facilities, are opened daily, and make trade at auction.

The consignment markets, local cooperative fishery markets, are located along coastal line and many of them are distributed in Jeonnam Province which has long distance of coastal line and many islands.

Total sales of fishery products through local cooperative's markets reached 1,426 thousand metric tons (W297 billion) in 1978 which is equivalent to 81% of total production excluding high-sea catches.

## III. PHYSICAL FACILITIES

Total market throughput in the local cooperative consignment markets has been rapidly increased. The throughput of 1,426 thousand metric tons is three times as much as that in 10 years ago. But the physical facilities has been little increased,

resulting in delay of landing and trading outside of auction floor. Average distance of land dock was 175 meters and not significantly different among landing harbors. The auction area was estimated to be average of 757 m<sup>2</sup> and increased as total sales of the market increases (Table IV-2).

About 40% of market buildings at landing harbors was made of non-permanent materials and require much costs to maintain the old facilities. Increase in demand for fresh fishes and fluctuation, daily and seasonal, in catches need more cold storage facilities and ice-making facilities. Shortage of such facilities raises daily and seasonal price variation and problems related to deterioration of quality and risk in marketing.

Thirty consignment markets at landing harbors have the cold storage and ice-making facilities of which capacities are freezing of 285 T/D, cold storage of 12,876 M/T, and ice-making 917 T/D in 1978. Those capacities account for 8, 7, and 17 percent of the national capacities of freezing, cold storage, and ice-making facilities respectively.

The landing and cold storage facilities of Pusan Fishery Market Corporation can be a example of shortage of the facilities for fishery marketing even if they are extra-ordinary large compared to that of other markets.

The consignment sale market of Pusal Fishery Market Corporation had the sales of 251 million metric tons which is equivalent to 18% of total consignment sales of the nation in 1978. The distance of its landing dock and auction area was 411 m and 23,230 m<sup>2</sup> respectively and did not increased during several years. As a result, average waiting time for landing is estimated to increased over time and to be 9.9, 11.3, and 14.0 hours in 1976, 1977, and 1978 respectively (Table IV-3). The consignment markets have average personal of 25 persons including administratives staff, auctioneer, auction supporting person, recorder, janitor and labor for loading and unloading (Table IV-2). Each market does

not have even one auctioneer, a auction supporting person, a recorder and a janitor.

#### IV. TRADING PRACTICE AND OPERATION

The markets in the producing area are classified into two categories of consignment sale markets of cooperatives and private wholesalers. According to official statistics, 81% of total domestic consumption was marketed through cooperative consignment markets while 19% was handled by private dealers in 1978. Marine products are enforced to be transacted in cooperative consignment markets. The products to be marketed for domestic consumption should be transacted at places appointed by the Office of Fishery in accordance with the Protection Decree of Marine Resources.

When a producer sells his product at Cooperative consignment market of base harbor he pays average of 4.7% fees to the market. When he sells it at other than base harbor he usually pays additional 2% to broker who acts as an agent middleman. In addition to this fees producer pays to labor union for unloading, locating and other miscellaneous services.

The costs for unloading and display for auction are estimated to be average of W1.7 and W0.8 per kilogram of fresh fishes respectively (Table IV-4). The consignment selling commission of local cooperative is used for subsidy to middleman as encouragement fund by 0.3%, subsidy to branch cooperatives by 0.5%, cooperative development fund by 0.2%, subsidy to operation costs of radiogram office and operation and maintenance costs of the market by remaining. Transactions at consignment markets are carried out by eligible middlemen appointed by the middleman should offer mortgage and guarantee money to the cooperatives. They also have to register more than two persons to the cooperatives as the quarantor. At the end of 1978, a total of 2,750 middlemen were working with cooperative consignment markets and their branches in-

dicaing 16 middlemen per market on the average.

The buyers who are usually wholesalers, forwarders or re-tailers pay middleman's commission fee of 3% of their gross purchases to middleman in the market. In addition to middleman commission fee, the buyers pay boxing cost of W1.5 per kg, packing cost W1.8 and loading cost of W1.2 per kilogram (Table IV-4).

Average purchases of a middleman amounted to W103 million per annum, W8,565 thousand per month in 1978, which yield middleman's receipts of W256 thousand per month. But there are many middlemen who have small purchase and in turn small receipts. About 63% of middlemen purchased less than W50 million in 1978. They have income of less than W125 thousand per month (Table IV-5).

The private wholesalers in the producing area consist of commission agents, private financing agents and inland forwarders. These agents make advance payments to producer under condition that producer bring his products to the agents. These agents collect interest or commissions from producers.

## V. PRICING EFFICIENCY

The marketing channel of fishery products can be classified into two categories of (1) producer → middlemen in consignment market at landing harbor → shipper → middlemen in wholesale market or coop, marketing center in consuming area → wholesaler → retailer → consumer and (2) producer assembler in producing area → wholesale market, public and unregulated, in consuming area → retailer → consumer (Figure IV-1).

The marketing margin of fresh fish, mackerel, through the first channel is calculated as 47% of consumer's price in 1977, which consist of 25% of explicit marketing cost and 22% of implicit costs including costs for own labor and capital and profit.

Retail margin is 20% of price paid by consumer and whole-sale margin, 14% (Table IV-6). Double auction in the consignment market in producing area and wholesale market in consuming area may cause to increase in marketing margin and costs.

The price of hair-tail, a popular fish for Korean consumer, fluctuated daily and seasonally and was significantly different among selling harbors (Table IV-7). The daily and seasonal price fluctuations might be mainly caused by variation in daily and seasonal catches, and poor condition and shortage of cold storage facilities. The wide difference in price among regions mainly comes from inadequate information system.

The limited telephone services alone are not enough to exchange market informations among regions and markets. The partial market news in wholesale markets in consuming area also are short to stabilize the fish price over time and among regions.

Small size of fishers and shortage of operation fund of middleman require the credit in advance by wholesalers and large assemblers, which require high interest and commission either in money term or in terms of bargaining power. In addition, local fishery cooperative fund is also not abundant to provide the advanced credit to fishers and middlemen.

The poor conditions of packaging and standardization cause the high marketing costs and inadequate market information services.

## VI. MAJOR PROBLEMS AND RECOMMENDATION

1) Due to the insufficient facilities in landing harbor, a substantial amount of fresh fishes are not able to land in proper time. This reduces freshness of the products causing price to decline.

Storage of cold storage facilities causes price fluctuation, daily and seasonal. Public investment for improvement in marketing facilities may be a means to reduce marketing costs and losses.



2) Due to the enforcement that the fishery product should be transacted in cooperative consignment market by the protection decree of marine resources, producers do not have option to choose markets at their preference. This protection decree also increase marketing costs and margins as a whole. The discontinuation of the decree might reduce substantially the revenue of local fishery cooperatives and might create idle capacity of cooperative consignment market at landing harbors.

The enforcement of marketing of fishery products at certain market should be removed in near future to reduce the marketing costs and to provide efficient price mechanism of resource distribution. But the local cooperatives should provide marketing services such as collective marketing of fishery product, market news and credit in advance for their member fishers.

3) The market information networks are required to provide market competitive forces which are main source for reduction of marketing cost. The better information system need its facilities and standardization and grading of fishery product.

Table IV-1. Number of Fishery Cooperatives and Their Branches at Landing Area, 1978

	No. of Coop.	Member	Consignment Market	Branch Coop.	Branch Office	Branch Business Unit	Marketing Center
District Coop.							
Pusan	1	1,497	4	2	-	4	-
Kyonggi	6	7,404	7	6	6	1	1
Kangwon	8	5,095	18	3	1	17	-
Chungnam	5	8,434	8	4	-	4	-
Jeonbuk	4	3,478	14	2	7	18	-
Jeonnam	19	47,432	36	21	19	35	2
Kyongbuk	8	11,374	24	8	6	3	-
Kyongnam	13	19,324	27	20	16	7	1
Jeju	5	13,107	7	4	5	2	-
Business Coop.	15	2,001	5	23	8	14	-
Processing Coop.	2	97	-	-	-	-	-
Total	86	119,243	150	93	68	105	4

Source: NFFC, Current Situation of Member Cooperatives, 1979

Table IV-2. Size of Consignment Markets and Their Branches, 1978

Sales	No. of		Average		Personnel							Middlemen	
	Markets & Branches	Physical Facilities	Distance of Land Dock	Auc- tion Area	Direc- tor	Clerk	Auc- tion- eer	Auc- tion Sup- port- ing Person	Re- corder	Jani- tor	Laborer	Number	Average Purchases per Middleman
W Million		m	m <sup>2</sup>					person					W thousand
Less than 100	32	128	93	0.6	0.4	0.5	0.2	0.1	-	0.4	3.5	5,985	
100- 300	35	85	212	0.4	0.7	0.4	0.3	0.1	0.1	0.9	5.9	16,277	
300- 500	9	155	182	0.9	1.6	0.6	0.4	-	-	2.2	10.4	19,448	
500-1,000	20	103	278	1.0	1.7	0.9	0.5	0.4	0.1	3.6	16.9	39,877	
1,000-2,000	17	327	671	1.0	1.9	1.2	0.9	0.9	0.8	14.1	20.5	67,470	
2,000-5,000	20	260	992	1.0	2.9	1.7	1.8	0.9	1.0	30.5	33.0	100,888	
More than 5,000	8	240	5,521	1.0	4.4	3.1	3.8	2.5	6.3	230.9	54.4	266,321	
Average		175	757	0.7	1.5	0.9	0.8	0.5	0.6	20.1	15.5	102,784	

Table IV-3. Waiting Time for Landing at Pusan Fishery Market Corporation

	Unit: No. of Ships(%)		
	1976	1977	1978
Less than 12 Hours	148 (58)	147 (49)	164 (36)
12 - 17	100 (39)	114 (38)	173 (38)
17 - 22	9 ( 3)	20 ( 7)	64 (14)
22 - 36	-	10 ( 3)	39 ( 9)
36 -41	-	3 ( 1)	10 ( 2)
Average Hours	9.9	11.3	14.0

Source: Jung, M.C., Marketing Situations of Fishery Products in Landing Area, Korea Rural Economics Institute, Working Paper 6, 1978.

Table IV-4. Selling Supporting Costs by Consignment Market, 1979

	Unit: Won/Kg of Fish				
	Incheon	Yeosu	Masan	Pusan	Average
Unloading	2.3	1.7	1.4	1.4	1.7
Display	0.9	0.5	0.8	0.8	0.8
Boxing	1.0	1.0	2.4	1.7	1.5
Packaging	1.6	3.0	0.9	1.9	1.8
Loading	1.3	1.0	1.5	1.0	1.2
Total	7.1	7.2	7.0	6.8	7.0

Table IV-5. Distribution of Middlemen's Purchases per Annum,  
1978

Purchases (W Million)		Proportion (%)
Less than	10	32.0
10 -	25	15.6
25 -	50	15.0
50 -	75	8.4
75 -	100	6.6
100 -	150	7.8
150 -	300	8.3
300 -	500	3.5
500 -	750	1.7
750 -	1,000	0.9
More than	1,000	0.2
Total		100.0

Table IV-6. Marketing Costs of Mackerel, Pusan-Seoul, May 1977

	Price Cost	Share
	(Won/15Kg)	(%)
Producer Received Price	2,646	52.9
Unloading & Display	20	0.4
Consignment Commission	106	2.1
Tax	28	0.6
Auction Price at Consignment Market	2,800	56.0
Loading & Packaging	109	2.1
Transport	80	1.6
Unloading & Display in Wholesale Market	30	0.6
Consignment Commission	198	4.0
Value Added Tax	50	1.0
Margin of Shipper	33	0.7
Auction Price at Wholesale Market	3,300	66.0
Middleman Commission	132	2.6
Margin of Middleman	268	5.4
Middleman's Selling Price to Wholesaler	3,700	74.0
Loading & Transport	30	0.6
Association Fee Including Tax	100	2.0
Margin of Wholesaler	170	3.4
Wholesaler's Price to Retailer	4,000	80.0
Retail Costs & Margin	1,000	20.0
Consumer Price	5,000	100.0

Source: Office of Fisheries

Table IV-7. Price Variation and Difference of Hair-Tail

	Pusan	Mogpo	Incheon	Masan	Yeosu	Seoul
Jan.	249	574	242	211	430	433
Fen.	315	364	480	174	251	395
Mar.	149	379	110	161	-	364
Apr.	116	597	99	116	106	355
May	137	597	165	137	117	448
Jun.	187	303	281	187	140	259
Jul.	234	278	210	230	142	276
Aug.	247	280	316	228	195	293
Sep.	269	269	345	234	201	266
Oct.	371	482	403	299	251	254
Nov.	380	313	407	346	250	284
Dec.	225	256	203	211	168	331
Average	270	329	300	250	201	300

[illegible]



## CHAPTER FIVE

### IMPROVEMENT IN LOCAL AGRICULTURAL COOPERATIVE MARKETING

#### I. INTRODUCTION

With the complexity and diversity of agricultural marketing channels and small business operation of a marketing agency, there is no effective linkage between production and consumption. Such an inefficient marketing is fundamentally due to the small farm operation that average output is too small to be marketed. Hence, how to collect farm products from many small farmers effectively and how to ship them to consumer market efficiently are the most important considerations in the entire agricultural marketing process."

It has been widely recognized that agricultural cooperatives should play an important role as a leading actor in the modernization of agricultural marketing in Korea. That is, the cooperatives should implement their marketing business more actively and efficiently so as to lower marketing margins and to secure better price for the products in the interests to small farmers. In particular, in order for the cooperatives to do its roles well, the present local cooperative marketing system needs to be re-examined and reappraised in the direction of improving the entire cooperative marketing system. In view of the importance of cooperative marketing activities and especially the need for the improvement of local cooperative marketing system, this study was proposed.

This study aims at (a) examining present conditions and problems of local agricultural cooperative marketing business, (b) providing useful suggestions to improve the cooperative marketing system, especially on collection stage from farm to first receiver, and (c) presenting information that are required for formulating rural market center development program.

To attain the above objectives, the survey was conducted through interviews with market staff members and top managers of local cooperatives which are located in Jinju city and its suburban. For the survey, 18 primary cooperatives, two county cooperatives, one special cooperative, and one collection point alongside express highway were selected. And 50 farm households were also selected in order to get information on their marketing practices at the farm level. In addition to primary data collected through the survey, secondary data reported by NACF were used to appraise the marketing business activities of the entire local cooperatives in the country.

## II. PRESENT STATUS AND PROBLEMS OF LOCAL AGRICULTURAL COOPERATIVE MARKETING

Over the last decade, agricultural cooperatives have conducted their marketing business activities and have made substantial efforts to improve agricultural marketing system for the benefits of both farmers and consumers.

In the 1960s, one of the most noticeable activities implemented by the cooperatives was the amalgamation program aimed at fostering self-support primary cooperatives. As a result of such a program, more than 20 thousand of small scale cooperatives at village level in the 1960s were merged into 1519 of large scale primary cooperatives at the township level by 1972. The successful completion of the amalgamation program would provide the sound base for the economies of large scale operation of the cooperative marketing business.

In the early 1970s, the agricultural cooperatives devoted much efforts to improve their marketing efficiency with emphasis on encouraging vertical integration of farm production with cooperative marketing, strengthening the collecting and shipping organization of the local cooperatives, promoting "orderly shipment" through the cooperative marketing channel, enhancing mar-

ketability of farm products handled by the cooperatives, and improving cooperative market information services. In spite of such a wide range of efforts, the cooperative marketing activities made little progress and had lots of difficulties in improving the efficiency of the marketing system.

In this chapter, study is limited to appraise major activities and to examine various problems of the marketing business conducted by the local agricultural cooperatives.

### 1. Farming Group

The completion of amalgamation program of the primary cooperatives have resulted in an expansion of the district boundaries of the cooperatives and an increase in the number of member farmers. Consequently, agricultural cooperatives have fostered farming groups as internal organizations of the primary cooperatives for the purpose of maintaining not only close liaison with farmers but also effective linkage between farm production and cooperative marketing.

The number of farming groups organized throughout the country reached approximately 10 thousand as of the end of 1978, covering a wide range of agricultural products including the products handled as government intrusted business. In most cases, the cooperatives provided the members of the farming groups with production funds, farm inputs and farming technologies, and in return the products produced by the farming group were recommended to be sold through the cooperative marketing channel.

It has been initially believed that the problems and difficulties faced by the local cooperative marketing and resulted from small farm operation could be alleviated considerably by the introduction of farming groups. However, most of the farming groups were not yet fully functioned and some of the organizations were still in a hibernation stage.

Major problems raised from the operation of the farming groups

are summarized as follows:

First, major functions of the present farming groups were confined only to joint works for farming practices and for purchasing agricultural inputs. Most farmers of the farming groups were keeping very much inactive attitudes in the introduction of new technologies to their farm operation, and thereby very little attention was paid to the improvement of agricultural productivity and marketability of the products produced.

Second, agricultural cooperatives supported production funds only to those who were the members of the farming groups with an annual interest rate of 15 percent. Thus non-members could not get such benefits from the cooperatives. The low-interest funds supported by the cooperatives might be an attractive factors to the farmers to be incooperated into the farming groups. However, this attraction might be a major cause for participation of many farmers in the organization, who do not really have the will to participate.

Third, the cooperatives were not only urging repayment of the loan from the members immediatly after harvest when the price of products was cheapest but also forcing them to sell their products through the cooperative marketing channel for the reason that the cooperatives accommodate them with a loan. This resulted in farmers' dissatisfaction to the cooperatives and in lowering the farmers' will to take part in the operation of the farming groups.

Fourth, it is very much desirable that all the agricultural products produced by the farming groups are marketed through the cooperative channel. According to a report by MACF, about 57 percent of the products produced by the farming groups were marketed through the cooperative channel in 1978 as shown in Table V-1. However, most of the products marketed through the cooperative channel were the products handled as the government intrusted business including cocoons, beer barley, sweet potatoes, and so

forth. The survey result showed that about 60 percent of the products sold through the cooperative channel were appeared to be the products intrusted by the government. Consequently, the marketing business activity of the cooperatives on their own account were limited to small amount.

Table V-1. Number of Farming Groups and Marketing Share of Agricultural Cooperatives, 1973-78

Year	No. of Farming Groups	Financial Supports	Total Production	Cooperative Marketing	Marketing Share of Cooperatives
.....(Million Won).....					(%)
1973	3,458	4,744	34,834	15,074	43.3
1974	7,029	9,268	99,200	34,488	34.8
1975	9,977	10,101	194,400	70,200	36.1
1976	12,028	14,804	350,120	108,186	30.9
1977	15,000	31,598	432,710	121,999	28.2
1978	10,006	13,750	353,365	201,019	56.9

Source: NACF

Finally, the number of cooperatives' staff members in charge of farming guidance was short compared with the number of farming groups organized. Furthermore, a staff member was requested to have plenty of knowledges and technologies on the management of the farming groups. In fact, however, it would be impossible to ask him to have such knowledges and technologies on so many varieties of crops. It was, therefore, hardly seen any efforts put by the staff to improve the agricultural productivity and marketability of the products in the farming groups.

## 2. Collecting and Shipping Organization

### (1) Sale Yard

Much effort has been devoted by agricultural cooperatives to perform the collecting function for farm products effectively. Agricultural cooperatives established cooperative sale yard at the producing area as a local marketing center. According to a report by MACF, as of the end of 1978, more than 1,700 sale yards were established over the country by agricultural cooperatives. However, the survey pointed out that most of them were not used for collecting the products but used for other purposes such as chain stores and warehouses for fertilizers, insecticides, and other agricultural inputs.

The reasons for poor utilization of the sale yards can be explained as follows:

- (a) Farmers were not willing to carry their small amounts of the products to the sale yards with their poor transportation modes.
- (b) Grading and packaging of the products were extremely difficult because of small amounts and many varieties of the products.
- (c) Marketing services provided by the cooperatives were usually very poor compared with those offered by private merchants.

On the survey, it was confirmed that cooperatives' sale yards were far inadequate for the efficient management and operation of the local cooperative marketing. In other words, the organizations were appeared to be unable to perform their original functions properly. Therefore, most of the local cooperatives depended their marketing activities not on the collection through sale yards but on circuit collection by trucks. However, a few cooperatives' sale yards located at the economic center of the district boundaries or in the local cities conducted their marketing activities fairly well, but the products collected from farmers were not shipped through the cooperative marketing channel but

sold directly to local buyers or consumers.

## (2) Collection Point

In addition to cooperatives' sale yard, agricultural cooperatives set up collection point alongside major express highway aimed at maximum utilization of the highway system for a long distant shipment and the development of rural areas adjacent to the highway. As of the end of 1978, 11 collection points were established throughout the country. However, the survey results showed that the use of all the collection points were extremely limited and ad dificit management of the points was inevitable because of the many reasons indicated as follows:

- (a) Due to the development of the highway system, local cooperatives could more benefits by arranging direct shipments of the products by either their own trucks or even hired trucks than by shipping through the collection points, if truck's loadage of the products were available.
- (b) The products channeled through the collection points would be shipped to the NACF marketing centers. Therefore, it was almost impossible to use collection points when the local cooperatives did not want to ship their products to the NACF marketing centers.
- (c) Even the farmers living nearby the collection points did not want to deliver their products to the points because of small lots of the products and poor transportation modes.
- (d) No establishment of crossroads on the highway nearby the collection points made unable both farmers and local cooperatives use the points.

According to the survey, the total amount marketed through the Jinyang collection point in 1978 were estimated at only 6 million won and approximately 80 percent of them were appeared to be rice alone. Further, all of the rice handled by the point

were depended on circuit collection by it's own truck with a capacity of 4.5 tons.

### (3) Dual Collection System

A keen competition between primary and special cooperatives in collecting agricultural products from farmers and in providing farmers with farm inputs was shown locally. There was no clear distinguish between primary and special cooperatives in performing their marketing and purchasing business activities in the producing area. For taking winter-vegetables as an example, it is desirable for horticultural cooperatives to handle the products because those products are considered as special crops. On the other hand, the products may also be handled by primary cooperatives because the products are produced in the specific area of locality. Consequently, at present both cooperatives were engaged in marketing business for winter-vegetables on a competitive basis. This competition was often accelerated by an excessive target of cooperative marketing business allotted by NACF.

The competition between primary and special cooperatives derived from the dual system for collecting agricultural products from farmers may greatly weaken the marketing activities of the local cooperatives as a whole and thereby reduced the countervailing power against private merchants.

### (4) Transportation Facility

Agricultural cooperatives have put much efforts on improving local cooperative marketing facilities with special emphasis on transportation facilities in order to strengthen collecting and shipping role of the cooperatives. As of the end of 1977, the number of trucks owned by the local cooperatives in the country totaled about 780 with an average capacity of about 4.5 tons. The survey revealed that 28 primary cooperatives located in the Jinyang and Sachon areas owned only 8 trucks with a small capacity and even the trucks were little used for collecting and



shipping farm products, resulting from inappropriate operation of the local cooperative marketing business.

Furthermore, the cooperatives' trucks were registered only for private use so that the cooperative transportation business with their own trucks was limited only to cooperative marketing and purchasing business for member farmers and some other business entrusted by the government. That is, transportation of general commodities for pay was not allowed. Thus, an empty return trip of cooperatives' trucks took often place when commodities were shipped to consumer markets and, because of this reason, transportation costs per unit of products were not low enough to compete with private truck company in transporting farm products.

In addition, since the trucks owned by the local cooperatives were not equipped with refrigerating or cooling system, lots of difficulties were appeared in transporting such perishable products as fresh fruits, vegetables, and livestock products over the long distance.

### 3. Grading and Packaging

Agricultural cooperatives have attempted to improve their grading and packaging practices in order to improve marketability of farm products and to establish orderly marketing.

During 1978, the 18 major farm products including eight products entrusted by the government were designated to be graded on the basis of the instructions provided by NACF and approximately 14 thousand farmers were selected from member farmers in order to take charge of sorting business for the designated products. Also the cooperatives attempted to introduce grading machine to major producing areas for the limited products such as apple, orange, eggs and so forth. Yet the efforts attempted by the cooperatives were not fully practiced and the practices implemented by the cooperatives were still in their infancy.

In 1977, about 1,800 inspectors who were licensed by the Agricultural Products Inspection Office and employed by the agricultural cooperatives were engaged in the inspection services for the 18 farm products. However, the survey revealed that actual inspection was limited to the eight products entrusted by the government and thereby inspection of the products handled by the cooperatives on their own account was almost neglected. Even if those inspectors were trained and licensed by the Agricultural Products Inspection Office, their knowledge and techniques on actual inspection were far inadequate so that they could not perform inspection services properly. Furthermore, they made often an error in judgement intentionally for the benefits of specified persons because the inspectors were belonging to the primary cooperatives as staff members.

On the other hand, the cooperatives tried to improve packaging materials for the products marketed through the cooperative channel. That is, a series of efforts was made to substitute straw bags by paper bags for rice packaging and wooden box by corrugated card board for fruits packaging. Also, the effort was extended to label every package of the major products with the name of the producers, species of the products, volume, weights and other necessary information related to the products. According to a report by NACF, 2.5 million of paper bags, 10 million of corrugated card boards and 6 million of cooperative labels were distributed to the member farmers in 1978. Nevertheless, it revealed that the new packaging materials and cooperative labels were adopted only by the limited number of farmers. In the case of the 28 primary cooperatives in the Jinyang area, only 5 thousand of corrugated card boards for pear packaging were supplied to the member farmers during 1978.

#### 4. Market Information

Accurate and timely information regarding to market condi-

tions is fundamental to successful operation of the local cooperative marketing business and to help farmers to devise well-organized plans for production and marketing of farm products. In general, farmers' access to pertinent market information through public agencies was extremely limited.

Since 1975, NACF has played an important role in collecting and disseminating market news for use by its member cooperatives as well as farmers. Recently, NACF installed 63 sets of teletype in NACF and its member cooperatives in order to collect daily market information from major producing area as well as consuming area and then to disseminate the information to its member cooperatives. In addition, NACF disseminated daily information on bidding price of the NACF marketing centers through the three major nation-wide broadcasting networks, and limited number of county cooperatives also distributed daily information on local market prices of major farm products through the local broadcasting networks.

Although NACF has made a substantial efforts on providing its member cooperatives and farmers with reliable market information, many local cooperatives and most farmers did not get the fullest benefits from it. The major problems in the local cooperative market information services are summarized as follows:

- (1) The present teletype system operated by the cooperatives is the best medium for speedy and timely dissemination of market news. This system, however, was limited in number only to 63 sets throughout the country, so that majority of local cooperatives were not benefited by utilization of the system.
- (2) Most of the information data reported by the cooperatives were limited to prices and quantity of the commodities handled within the cooperative marketing channel. Furthermore, the information services were designed mainly to aid the cooperative business itself rather than

direct use by member farmers for their particular marketing activities.

- (3) Daily market news disseminated through radio broadcasting networks of which data supported by the cooperatives were being widely used by farmers. However, Price information tended to be dubious and inadequate mainly because it was not related to specific grades and standards.

As a result, most of the farmers were not in direct touch with the primary cooperatives for the purpose of receiving market information and thereby obtained market information, mostly on prices, from private merchants or neighbors. The farm household survey results showed that approximately 70 percent of rice farmers and 60 percent of hog raising farmers obtained price information from local assemblers either at the farm or in the local market. Because of such an uncertain and inadequate market information, farmers could not make appropriate decisions on selling price, method, time, and place that would give them maximum returns. This was a key factor for farmers to hesitate in marketing of their products through the cooperative marketing channel.

##### 5. Market Staff Member

In general, it is very difficult to understand the agricultural marketing system because so many different products are marketed by different marketing institutions which perform various marketing functions. Thereby, talented market personnel with managerial and technical ability are essential for the development of the cooperative marketing system.

However, one of the most important problems with that the local cooperatives are confronted was the lack of market personnel who were qualified in the field of the agricultural marketing as well as cooperative marketing business. According to the survey, most of the primary cooperative staff members had little interest or background in the cooperative marketing busi-

ness. And most of them were engaged in the business for less than two years, on the average. Furthermore, top managers of the primary cooperatives were generally uninformed and were not conversant with the marketing business methods. There is, therefore, no initiative with them for taking to modern marketing techniques.

In addition, the cooperative staff members engaged in marketing business were suffered from heavy workload beyond their ability. At a primary cooperative, marketing business was taken up by one person but he had to be in charge of many other business activities together with marketing business. The survey indicated that a market staff prepared more than twenty different kinds of official letter each month. Consequently, they were dissatisfied with their present jobs and working conditions.

#### 6. Marketing Achievement and Practices

Local cooperative marketing business has been increased steadily in volume since 1973. According to a report by NACF, the total marketing business turnover of the local cooperatives including primary, county, and special cooperatives during the period 1973-1977 increased about 9 percent per year in real terms. In particular, the primary cooperative marketing business expanded rapidly over the last 6 years after successful completion of amalgamation program, showing an annual average increase rate of 19 percent in real terms.

Table V-2. Marketing Turnover of Local Agricultural Cooperatives, 1973-1977

Year	Primary Cooperatives	County Cooperatives	Special Cooperatives
.....(Million Won).....			
1973	64,115	116,273	25,713
1974	121,888	210,421	37,652
1975	181,316	209,869	56,473
1976	228,180	262,563	47,536
1977	275,578	287,017	66,943

Source: NACF

According to the survey results of the 28 primary cooperatives, however, many problems appeared in the marketing achievement and practices as follows:

First, a small portion of agricultural products collected by the local cooperatives were shipped through the cooperative marketing channel. As Shown in Table V-3, the proportion of farm products shipped through the cooperative marketing channel to the total handled by primary cooperatives was only 22 percent in 1978. Approximately 70 percent of the total were marketed through commercial channels.

Table V-3. Percentage Distribution of Marketing Turnover of 28 Primary Cooperatives by Market Outlet and Crop, 1978

Crops	NACF Marketing Center	Private Merchant	Other Outlets	Total
	.....(percent).....			
Grains	30.0	70.8	0.2	100.0
Vegetables	13.0	87.0	-	100.0
Fruits	19.5	11.6	68.9	100.0
Others	20.0	80.0	-	100.0
Average	22.3	70.2	7.5	100.0

Second, marketing operation of the local cooperatives was dominated by government intrusted business activities. All of sample primary cooperatives handled industrial crops such as cocoons, sweet potatoes, beer barley and so forth as government intrusted business along with their own marketing activities. As the result of the survey, about 60 percent of the total marketing turnover of the primary cooperatives in 1978 were from government intrusted business activities as shown in Table V-4. The degree of dependence on government intrusted business become greater as the business volume of the total cooperative marketing increased.

Table V-4. Percentage Distribution of Marketing Turnover of 28 Primary Cooperatives by Type and Size of Marketing Business, 1978

Marketing Turnover  per Coop.	No. of Primary Cooperatives	Percentage of Marketing Turnover		
		Cooperative Own Business	Government Intrusted Business	Total
(million Won)		.....(percent).....		
Less than 100	6	59.8	40.2	100.0
100 - 200	11	52.2	47.8	100.0
200 - 300	7	42.0	58.0	100.0
300 and Over	4	17.5	82.5	100.0
Total or Average	28	39.4	60.6	100.0

Third, the local cooperative marketing business depended heavily upon an one-side purchase method. Agricultural cooperative is an organization for the member farmers. Therefore, it is desirable for the cooperative marketing to be carried on consignment basis which is a beneficial procedure for expanding the volume of the cooperative transacted and for maintaining stable management of the cooperatives. Nevertheless, the survey showed that about 55 percent of the total primary cooperative marketing in terms of market value in 1978 was transacted an one-side purchase method. This proportion was significantly different from commodity to commodity base, however, showing only 9 percent for fruits and vegetables and 77 percent for grains.

Finally, the local cooperatives handled a variety of farm products and thereby business volume of each product was small in size. In general, more than 10 different kinds of farm products were handled by a primary cooperative and business volume of each product marketed through a cooperative was extremely small in size except a few major products.

### III. IMPROVEMENT OF LOCAL AGRICULTURAL COOPERATIVE MARKETING

#### 1. Development of Farming Groups

In order to overcome the difficulties of collecting farm products from many small farmers, highly efficient joint production groups need to be organized at the producing area. Then, the cooperative marketing business has to be closely connected with and conducted on the basis of the organizations. As mentioned earlier, at present, more than 10 thousand of farming groups were organized throughout the country as internal production organizations of primary cooperatives, but they were not able to perform their original functions properly, mainly because of operational problems. Therefore, the most important task to be done at first would be to foster the present farming groups with the proper guidance and management, prior to organize new farming groups.

It should be recognized that, if the operational performance of the present farming groups was not superior to that of individual farming, farmers would never take part in these organizations and they would surely evaluate it as the useless organizations.

For successful operation of the present farming groups and then providing better base for efficient cooperative marketing of farm products, much efforts should be made in the following activities.

First, a short-term production loan provided by the cooperative to the members of the farming groups needs not to be continued any longer. In stead, it is desirable for the cooperatives to provide the farming groups with a long-term loan needed for mechanization of farm operation and other useful facilities required by the groups. The farm mechanization would be considered as one of the most effective devices for solving the problems of labor shortage in rural areas. On the other hand, it is recommended that loan repayment should be made within a reasonable



time after harvest, but not immediately after harvest, so that farmers are not forced to sell their products when prices are usually lowest.

Second, the cooperatives should concentrate their efforts on improving agricultural productivity of the farming groups and reducing the production costs by adopting new techniques and improved farm practices. In particular, it is strongly recommended that improved varieties must be introduced to the farming groups and the variety should be uninformed at least within a farming group so as to make efficient management of the whole production process through joint works for raising seedlings, diseases control, grading, and so forth. The technical guidance would be achieved by close cooperation with the Office of Rural Development and its subordinated organizations.

Third, the farm products produced by the farming groups must be shipped through the cooperative marketing channel. In order for the cooperatives to secure adequate amounts of products for marketing, it is recommendable to make a contractual arrangement between the members of the farming groups and the primary cooperatives. Since there are many possibilities in making contracts, depending upon their methods and conditions, intensive study needs to be done to develop an effective contractual arrangement between them.

Fourth, the crops to be adopted by a farming group should be limited to a few main crops in a producing district and must be homogeneous and capable standardization as long as possible.

Fifth, among the products produced by the farming groups, the products which are possible to be graded and packaged on the farm level should be done in that way prior to shipping through the cooperative marketing channel.

In addition, the expected shipping date by respective farm-groups must be determined through the members' discussion right before the harvest so as to make effective circuit collection by

the proposed Local Transportation Center as mentioned below.

## 2. Establishment of Local Transportation Center

The collection and shipment of farm products at the producing area are regarded as one of the most important activities for the efficient operation of cooperative marketing business. As noted earlier, however, the local cooperative marketing, in general, was conducted on a small-scale, irregular and subsistence basis. Also, cooperative marketing facilities including transportation modes were inadequate which were one of the big constraints. It can be concluded that the present cooperative organization for collecting and shipping farm products can no longer make an effective contribution to solving the problems of the agricultural cooperative marketing.

In this connection, it is quite desirable to establish a so-called "Local transportation Center" at either major producing area or alongside the express highway which are direct marketing channel from the farming groups to the NACF marketing centers. These centers are only responsible organization for the collection and shipment of farm products. Consequently, the present sale yards operated by the local cooperatives need not to be functioning any longer and the present collection points alongside the express highway may be integrated into the new organizations proposed if possible.

A primary function of the local transportation center is to collect farm products from the farming groups and ship them directly to the NACF marketing centers. In order for the centers to perform above function properly, the following actions should be taken by NACF and its member cooperatives.

- (a) For the efficient operation of the local transportation center, a nation-wide cooperative transportation networks should be established by NACF. Also, comprehensive information services for efficient movement of farm prod-

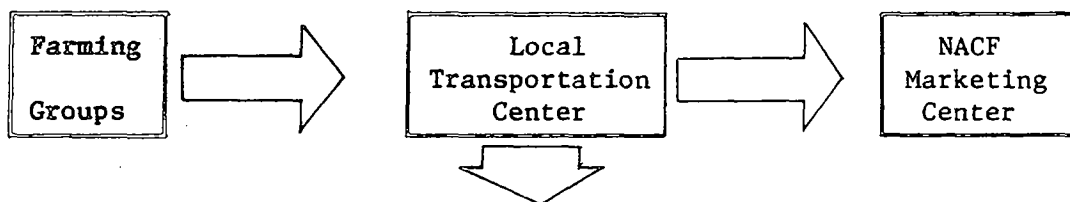
ucts and maximum utilization of transportation facilities need to be carried out by a central organization.

- (b) The local transportation center should hold various types and sizes of trucks equipped with or without refrigerating system. In addition, pallet or container system need to be introduced and the transportation facilities such as truck terminals and loading and unloading facilities should also be installed at the center.
- (c) The local transportation center must be located in a convenient place for use of the existing crossroads of the highway. The present collection points at where there is no crossroads should be removed to some other place where is possible to use existing crossroads of the highway.
- (d) Market information services at the local transportation center is hoped to be carried out for improving the efficiency of its collecting and shipping functions as well as planned shipment. The information services should include not only possible volume which can be collected from every farming group in the district boundaries but also daily auction prices and arrivals of the products at the NACF marketing centers.
- (e) In addition, the center would be responsible for carrying out planned shipment. The nation-wide system for planned shipment, of course, is desirable for the effective mediation of total product movements. For this purpose, the center must operate low-temperature warehouses for keeping perishable products such as fresh fruits, vegetables and livestock products.

The primary responsibility for establishing the local transportation centers and their related facilities indicated above and for raising necessary funds would rest with NACF and its member cooperatives. However, in view of the importance and neces-

sity of the cooperative marketing activities, it is strongly suggested that the government should provide long-term loans with a low interest rate for establishing the centers and their related facilities.

### The Proposed Local Transportation Center



#### 1. Purposes

To reduce marketing margins and secure better price for farmers through circuit collection directly from farming groups and planned shipment to the NACF marketing centers.

#### 2. Functions

##### 0. Main Functions

- \* Collection and Shipment

##### 0. Subsidiary Functions

- \* Grading and Packaging
- \* Product Inspection
- \* Storage
- \* Market Information

#### 3. Facilities

- \* Truck Terminal
- \* Loading-Unloading Ramp
- \* Low-Temperature Warehouse
- \* Grading and Packaging Facilities
- \* Teletype System
- \* Main Office

#### 4. Location

- \* Center of Main Producing Area
- \* Adjacent Crossroads of Express Highway

### 3. Enhancement of Grading and Packaging

Grading and packaging of farm products are pre-requisites for the efficient operation of the agricultural cooperative marketing business. Since the cooperative marketing business in the past was enforced in the same way as middlemen's operation without performing grading and packaging services properly, it was impossible to provide the sound base for fair trade practices and thereby the cooperative marketing activities were always in a disadvantageous positions against the private merchants.

Even though it is very difficult to perform grading and packaging functions properly at this stage, the cooperatives should concentrate more efforts continuously upon enhancing grading and packaging practices of farm products. The cooperative marketing should be conducted on the basis of three principles which are an essential pre-requisites for efficient operation of the cooperative marketing. That is, unconditional consignment, planned shipment and pool accounting. In order for these principles to be kept strictly, the products to be marketed through the cooperative channel must be graded and packaged in advance.

#### (1) Standardization and Grading

An ultimate purpose of standardization and grading of agricultural products is to differentiate the products to meet the consumer's various desires. However, it is very difficult to meet consumer's standards in the marketing process because measuring techniques on consumer-grade factors are usually subjective in nature. It may be, therefore, desirable for the cooperative grade to depend on market standards which are usually objective in nature so as to secure speedy and fair transactions. For example, the important grading standards for rice have variety and area produced, and for fruits and vegetables have variety, size, color and area produced. The grading system of the cooperatives is hoped to be achieved at first by the farming group basis and the joint sorting facilities need to be introduced to

the main producing area. In addition, there is necessity of strengthening self-inspection system in the cooperatives.

Provision of the staff members required for sorting and inspection of the products handled by the cooperatives and running on-the-job training courses for them are also needed for performing the function of grading and inspection activities. In particular, since the staff members who are supposed to be an inspector must have professional knowledges and skill-full experiences on the jobs, it is desirable to provide them with special training courses. Also, it is important for them to be put under the provincial branch of NACF and dispatched them to the primary cooperatives in order to eliminate hometown decision and biased judgment.

## (2) Packaging

The packaging of the products handled by the agricultural cooperatives is desirable to be made with the small units to meet the consumer's various preferences. Also, it is requested that the packaging has to be done at the producing area by products and grades, and the cooperative labels should be attached. The repackaging of the products during marketing process is not only doubling packaging costs but also loosing "orderly marketing" of the products.

On the other hand, it is quite desirable for NACF to expand the present distribution system for packaging materials. NACF and its member cooperatives should make their effort to distribute good quality packaging materials to farmers by supplying at low cost and by reducing a handling commission for farmers who sell their products to the cooperatives by the use of packaging materials supplied by the cooperatives.

Fortunately, the agricultural cooperatives have begun to show concern for the improvement of packaging materials and some efforts have already been started. That is, at present, NACF is planning to have a standard specifications on 52 items of products, to use different types of packaging materials by grades

and marketing channels, and to settle the design, size and solidity of the packaging materials by 1981.

#### 4. Improvement of Training Program

In order to avoid poor management, the staff members in charge of marketing operation should be trained and educated as early as possible. A market staff has to acquire specialized technical skills and management knowledge on the cooperative marketing business. It is, therefore, necessary not only to provide them with more intensive type of cooperative training but also to arrange them for specialized courses. The main subjects of the courses for market staff members cover the matters relating cooperative marketing management and general principle of agricultural marketing. A major emphasis throughout the training period would be placed on acquisition of specialized technical skills and management knowledge about grading, packaging, product inspection, and market information.

In addition to market staff training, training courses for top managers of local cooperatives are needed. From the field survey, it was noticed that many of top managers of primary cooperatives had little knowledge about principles and practices of cooperative marketing and did not have clear idea of the nature of marketing problems being faced by their cooperatives. In this respect, the courses for top managers should be arranged to include subject matters which will be most useful to them in terms of enabling them to perform their duties and responsibilities more efficiently.

At present, the NACF Training Institute is responsible for providing training facilities and carrying out a planned and integrated training program primarily for those who are engaged in the cooperatives. It is desirable for the Central Training Institute operated by NACF to provide market staff members and top managers of the local cooperatives with special training courses.

#### IV. CONCLUSIONS AND RECOMMENDATIONS

Over the last decade, much efforts have been devoted by the agricultural cooperatives to the improvement of agricultural marketing system. That is, NACF and its member cooperatives have concentrated their efforts on not only organizing the farming groups at the producting area but also establishing sale yards at the local cooperatives and collection points alongside the express highway in order to strengthen marketing activities of the local cooperatives. In addition, their efforts have been extended to improve various marketing facilities and market information services.

Despite such a wide range of efforts, the local agricultural cooperative marketing business has yet made little progress and had lots of difficulties in improving the efficiency of their marketing activities. Major problems pointed out in this study are: (a) lack of close connection between farm production and cooperative marketing due to the ineffective management of the farming groups, (b) poor performance of collecting and shipping functions because of organizational mistake and inefficient operation of cooperative sale yards and collection points, (c) the lack of planned shipment owing to inadequate marketing facilities and market information services, (d) a failure to improve marketability of the products handled by the cooperatives mainly because of the weakness of grading and packaging functions, and (e) heavy dependence upon commercial channels by the local cooperatives due to the lack of vertical integration of their shipping organizations with the NACF marketing centers. Those problems and difficulties have been rooted in the local cooperative marketing process for a long time. As a result, marketing performance of the cooperatives was too poor to enhance farmers' benefits so that farmers' distrust to the cooperatives became more serious.

It is very important to recognize that the success of the cooperative marketing depends largely upon how will it be supported



by farmers. The only way to acquire farmers' confidence in the cooperative marketing system would be to secure economic benefits for member farmers through efficient operation of the cooperative marketing business. In order for the cooperatives to do the jobs well, the present local cooperative marketing system should be improved and strengthened as following directions:

First, it is very much desirable to strengthen the vertical integration of farm production with cooperative marketing by giving priority to foster the existing farming groups. It is also essential for improving agricultural productivity of the farming groups and marketability of the products produced by introducing new technologies.

Second, it is strongly recommended that the Local Transportation Centers should be newly established either at the producing area or adjacent crossroads of the express highway. The primary responsibilities of the center would be to perform the functions of "circuit collection" of farm products directly from the farming groups and "timely shipment" to the NACF marketing centers. These transportation centers proposed are only responsible organization for the collection and shipment of farm products. Consequently, the present sale yards and collection points need not to be functioning and longer.

Third, in order for the proposed transportation centers to perform above functions properly, various marketing facilities including transportation modes and low-temperature warehouses are needed to be established. To secure these facilities at the center, lots of funds will be required. It is strongly recommended that a substantial portion of the funds should be supported financially by the government.

Fourth, grading and packaging of farm products are essential for the efficient operation of the cooperative marketing business. Therefore, farm products to be handled by the cooperative should be graded and packaged in advanced at the producing area, and co-

operative labels should be attached. For this reason, the co-operatives should concentrate their efforts on establishing co-operative market standards, training inspectors, and improving packaging materials.

Fifth, the cooperative marketing business should be conducted on the basis of unconditional consignment, planned shipment, and pool accounting. At present stage, of course, many difficulties are expected to follow above principles, but it should be recognized that those principles are an essential pre-requisites for the efficient management of the cooperative marketing business.

Finally, the cooperative staff members in charge of marketing business should be trained as soon as possible in order to avoid poor management of the local cooperative marketing business. Emphasis of the training program should be placed on acquisition of specialized technical skills and management knowledge about grading, packaging, product inspection, and market information. In addition, general training courses for top managers of the local cooperatives are needed.

In short, this study emphasizes that the proposed local transportation centers are only responsible organizations for collecting and shipping farm products at the producing area. Thus, the primary cooperatives are able to concentrate their efforts on fostering farming groups only. In other words, the primary co-operatives are responsible for production of the farming groups and the proposed centers are responsible for marketing of the products from the farming groups to the NACF marketing centers so as to achieve the specialization of the local cooperative business.

So far, an integrated scheme for the improvement of the local cooperative marketing system are discussed briefly. However, the efficient operation of the cooperative marketing depends upon not only internal conditions of the cooperative organizations them-

selves but also external factors such as unfair trade practices implemented by private merchants and strong intervention of the government in agricultural marketing process. In this respect, the government should put more intentional efforts to secure the independence of the cooperative marketing activities, to eliminate unfair and unreasonable trade practices implemented by private merchants, and to provide the cooperatives with financial supports so as to maximize the efficiency of the cooperative marketing business.