

Changing Structure and Functions of Rural Periodic Markets in Korea: A Perspective Survey*

Sung-Hoon Kim**

I. Introduction

As Skinner adequately explains, in most agrarian societies, rural markets are normally periodic rather than continuous day by day.¹ 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

*The All-Korea Rural Market Survey in Korea 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 appeared at 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.

**Professor of Agricultural & Resource Economics, Chung-Ang University, Seoul, Korea.

1. See Skinner (1964) pp 10-16.

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 market.

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' weekend relief.

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.

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.² 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.³

II. 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 pro-

² Abbott (1958) p 27

³ 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.

portion 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 periodic 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 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

Table 1.
DISTRIBUTION OF RURAL PERIODIC MARKETS BY TYPE OF MARKET, 1975 AND 1978

Province	OPM ¹⁾ (A)		OPLM ²⁾ (B)		Subtotal OP Mar- kets (A+B)		IPLM ³⁾ (C)		Subtotal PL Mar- kets (B+C)		Defunct Markets (D)		Total Rural Markets (A+B+C+D)		Total Rural Markets (A+B+C+D)	
	'75	'78	'75	'78	'75	'78	'75	'78	'75	'78	'75	'78	'75	'78	'75	'78
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
Gangwon	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.	1,351	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

5-10 million won, and central market over 10 million won. As the value of money with the trade volume increase, suggested new criteria in 1979 are: LT 10 million, 10-20 million and over 20 million won (1 US\$ is equivalent to 600 won in 1980).

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.⁴ Noteworthy was the evidence shown in Map 1 and 2 that the Christaller's classical central-place theory and urban hierarchy have empirical supports in Korea rural market systems.

The All Korea Rural Market Survey in 1975 has found that 1,043 rural markets in South Korea were the 5-day cycle;⁵ 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, the 2nd and 7th days in 192 markets, the 3rd and 8th days in 217 markets, the 4th and 9th days in 206 markets, and that of 5th and 10th days were observed in 214 markets.

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 91.6Km².

A typical market serves a total of 3,267 households with 17,512 persons, of which farm population accounts for about 74 percent. The largest average market-dependent area covered is as 209.55 Km² in Gangweon province, followed by the second largest per-

⁴ For the conceptual classification of market hierarchy, read Berry (1967).

⁵ 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.

market dependent area of 125.66 Km² in Gyeongbuk province. Both are belonged to relatively mountainous region where population is sparsely distributed and/or transportation conditions are relatively poor. The least per-market dependent area is 57.69 Km² 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

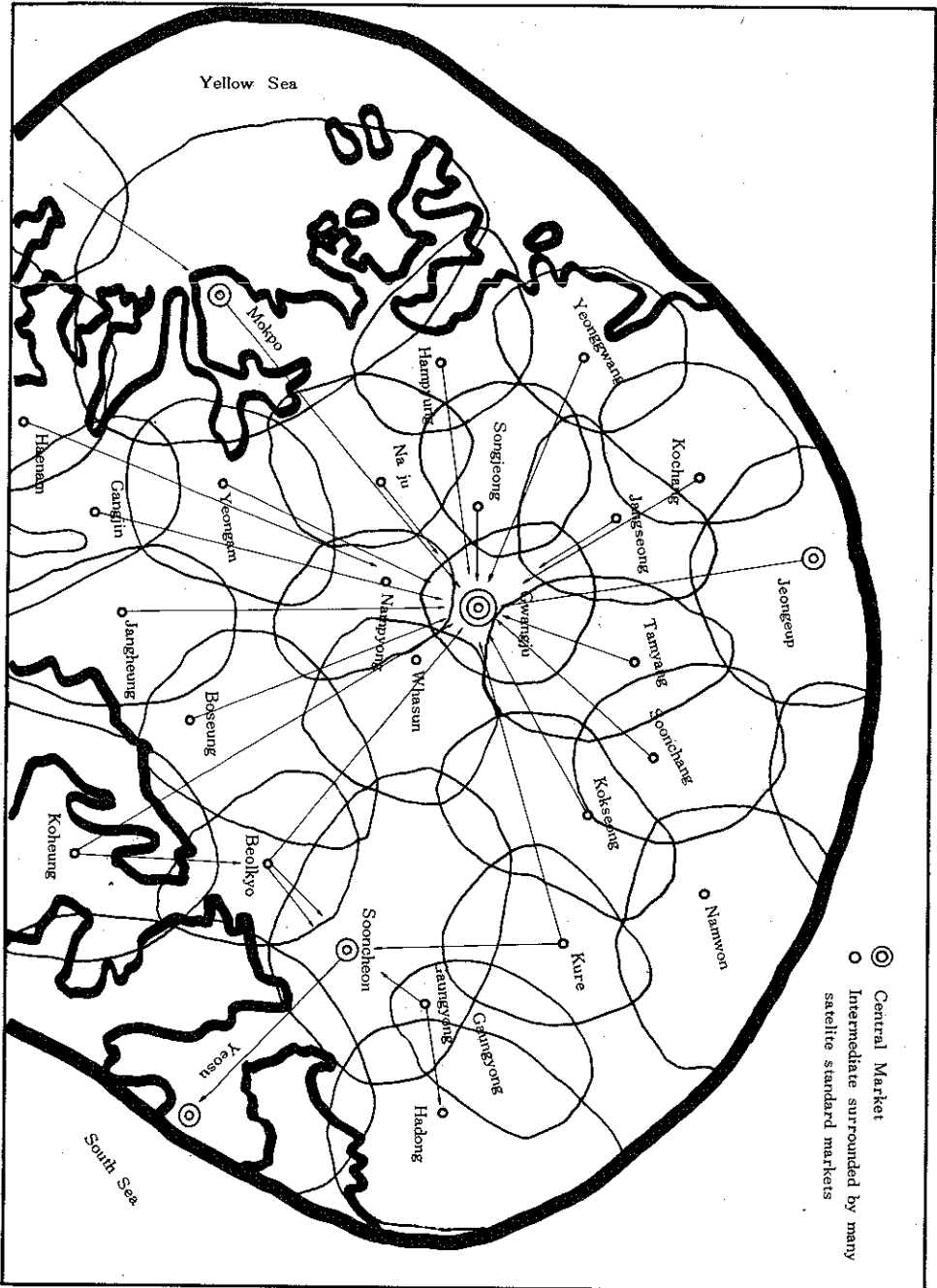
Periodic markets, in general, open at 8-10, a.m. and close around 3-5, p.m.; and the most busy hours are between 10:00, a.m. and 3:00, p.m. The busiest season of market in Korea falls in the months of February before lunar calendar New Year, September around lunar calendar August Moon and November just 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.

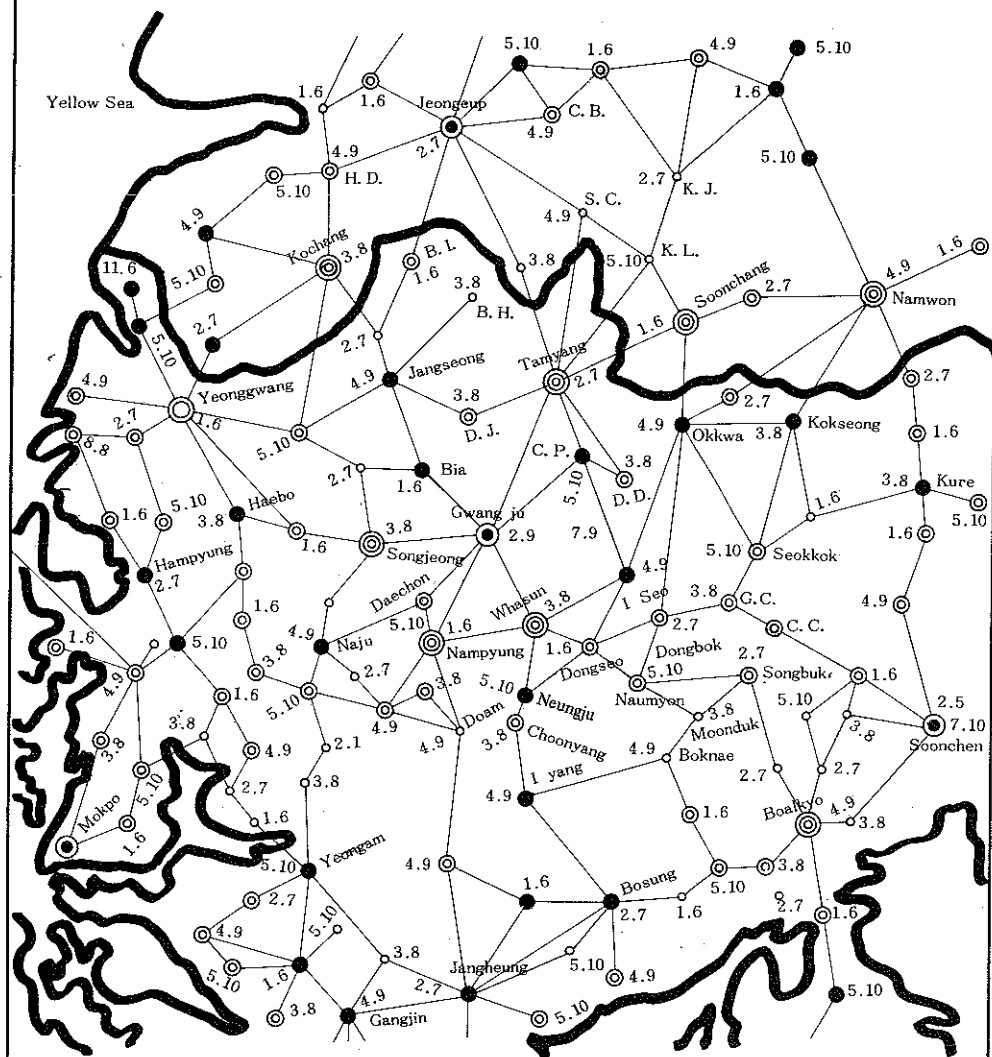
Per Market-Day participants

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.

MAP 2. MARKETING AREAS AND NETWORK, OF CHONNAM PROVINCE IN A HIERARCHY DIAGRAM



MAP 1. RURAL MARKETS NETWORK, CHONNAM PROVINCE, 1977



Per Day Transactions in won

- LT 1 million Won
 - ◐ 1-5 million Won
 - 5-10 million Won
 - ◑ 10-20 million Won
 - ◒ Over 20 million Won
- Arabic Numbers :
Market days

Table 2
MARKET DEPENDENT AREAS POPULATION AND MARKET SALES
BY PROVINCE, 1975.

Province	No. of Markets Excl. IPLM	No. of Villages		Dependent area (Km ²)		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

Continued from Table 2

Province	Population		Sale Proceeds per Market day		Annual Proceeds per Market	Annual Per Km ² 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	2,334,017	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

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 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 retailers; 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, the so-called "Seung-Soo" or "Doejaeng-i" in Korean 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 standards advances.

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, electronic 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 1918 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 terms of value of transactions. A case study made in the Whasun County, Jeonnam province ascertained that the physical market throughput of farm production averaged as 19.1 percent 1977.

Farmers surveyed in 1975 indicated that about 30.3 percent of foodgrains and 60.4 percent of fresh produce they marketed were

Table 3.
PER MARKET DAY SALES VOLUME OF AN ORDINARY PERIODIC
MARKET EXCLUDING LIVESTOCK

(Unit: 1,000 Won per Market Day)

Classification	Gyeonggi	Gangweon	Chungbuk	Chungnam	Jeonbuk	Jeonnam	Gyeongbuk	Gyeongnam	Jeju	National
Foodgrains	1,687.9 (39.3)	1,706.9 (41.5)	1,975.8 (39.5)	1,929.6 (39.5)	2,215.6 (39.0)	2,055.5 (41.2)	1,884.5 (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 Annium	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.
Sources: S.H. Kim (1977).

sold to the periodic market. The recent case study in 1979, however, shows a decreasing trend of agricultural sales through the periodic market exits, that is, 12.3 percent and 34.8% respectively, as accessibility to larger urban centers and to cooperative marketing channels gradually improves (Table 4).

Table 4
AGRICULTURAL PRODUCTION, MARKETABLE SURPLUS AND PERIODIC MARKET THROUGHPUTS, WHASUN COUNTY, 1979

Commodity	Production (A)	Marketable Surplus (B)	Five-Day 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
Miscl 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

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

ing periodic market.

It is, however, 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. Thus, annual sales of all Korea 934 periodic markets in total 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 agricultural products to total 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 cooperatives 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.

Physical Facilities 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 m² equivalent), on which 60.4 stalls and sheds with building area of 354.1 pyong (1,169 m²).

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

Thus, it is 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 market yard maintainance 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 m²) of market area on which 61.6 pyong (170 m²) 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 wellpaved 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 tim 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 house. It is not uncommon to find no 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 that agriculturally-oriented, the primitive state of market facilities convert into morden store market.

III. Trading Practices, Efficiency and Supporting Services

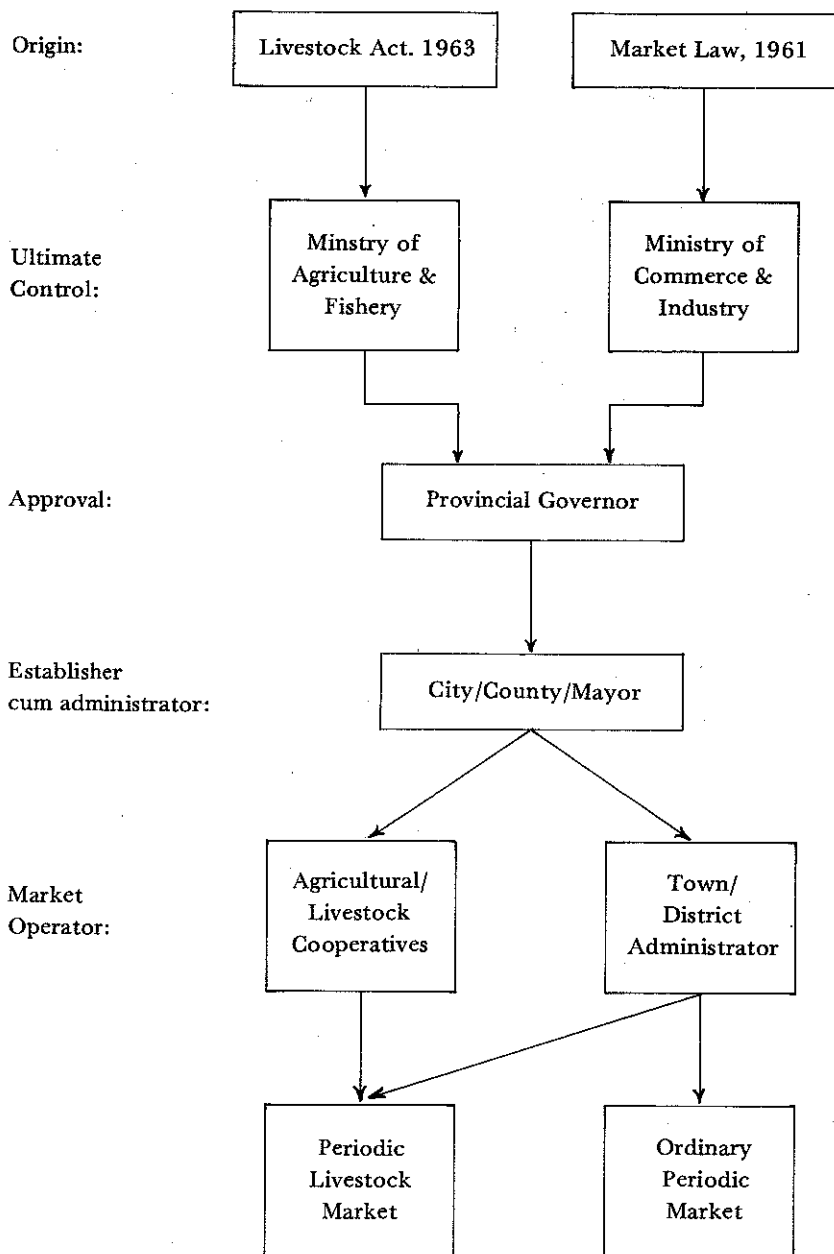
Market Management

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 (see Map 3) 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 through 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

Map 3.
ORGANIZATION & ADMINISTRATION



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.⁶ 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 employes 2-4 temporary workers to collect fees. Due to short of manpower, such routine works as clearing 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 is 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 complementary relationship. Because of this, a few years ago, even National Agricultural Cooperatives Federation (NACF) 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 thorough 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

6. 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.

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 m²), 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 than the actual, indicating 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 parties related.

Market entrance charges for livestock are collected at the front gate of the livestock market by same Eup/Myon office and any entries 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 1978.⁷ The commission revenues collected by cooperatives together with other income 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%).

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 vary ranging from 31.8% for garlic to 168.4% for chinese cabbage. The degree of price fluctuation ranges from 40.8% for green welsh onion to 181.4% for round onion.

Furthermore, 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.⁸

⁷ 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.

⁸ For details, see Kim (1979) pp. 99-141.

As discussed earlier in Section II, 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 marketing was prevalent. And yet, the marketing bills generated during the collecting stage at farm and primary market account for about 30% of total margins depending by commodity (see Table 5).

Table 5.
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
Wholesaling 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 commercial crop-growing areas, 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 5, the middlemen-merchants' 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 un-tolerable 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 the 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 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, assemblers-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.

Weighting, 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.

IV. 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 rural economy becomes more commercially oriented in accordance with the rapid urbanization/industrialization process, the periodic market has shown a tendency of more consumer-oriented and the daily market components grow larger and larger, even as an agricultural assembly-wholesale market.

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 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.⁹

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

- 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 and characteristics of commodities handled in terms of per km² volume of trade in rural markets), relevant policies and programs for market development are to be executed. As a result, certain consumer-oriented markets may be transformed into daily retail market for rural-urban consumers, while selected agricultural central market-places may need to be emerged into an economically viable assembly-wolesale market in rural settings as seen in Taiwan.
- 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 and 1,500 cooperative chainstores nearby rural periodic markets over the country, may take over the management of adjacent ordinary periodic markets to consolidate the current cooperative marketing programs into a forward linkage program to urban marketing centers.
- 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-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 based on urban and rural wholesale markets 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, either as retailing center or assembly-wholesaling market.
- 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.

References

- Abbott, J.C. *Marketing Problems and Improvement Programs*, FAO, Rome, 1958.
- Belshaw, Cyril S. *Traditional Exchange and Modern Markets*, Prentice-Hall, Englewood Cliffs, N.J., 1965.
- Berry, Brian J.L. *Geography of Market Centers and Retail Distribution*, Prentice-Hall, 1967.
- German Foundation for International Development, *Marketing, A Dynamic Force for Rural Development*, Berlin, 1978.
- Harrison, Kelly, "Public Policies and the Development of Effective Agricultural Marketing Systems," *Agricultural Policy*, Inter-American Development Bank, Washington, D.C., 1975.
- Ishihara, Hiroshi, "Recent Development of the Study on Traditional Markets: 1967-1976," *The Human Geography (Jimbun-Chiri)*, Vol. 29 No.6, Dec., 1977.

Kim, S.H. *The Structure and Functioning of Rural Periodic Markets in Korea*, National Agricultural Economics Research Institute, 1977 (In Korean).

—, *Towards Modernization of Agricultural Marketing system in Korea*, Chung-Ang University, 1979.

Lee, C.Y. "Improving National Marketing Systems for Economic Development," *The Fifth World Congress on Marketing*. New Delhi, 1976.

Skinner, G. William, "Marketing and Social Structure in Rural China," *The Journal of Asian Studies*, Vo. 24 No.1, November, 1964.

Wolf, Eric R. *Peasant*, Prentice-Hall, 1966.