

# Functional Characteristics and Spatial Structure of Periodic Markets in Youngdong County, Korea\*

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## 영동군 정기시장의 기능 특성과 공간 구조\*

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**Abstract :** The purpose of this study is to analyze the characteristics of traders and consumers visiting rural periodic markets so as to understand central functions and spatial structure of periodic markets. As a case study on Youngdong County in Korea, this study collected data from field interviews with traders and consumers in eight periodic market areas located in the county. While most approaches in periodic market research are either economic-locational or socio-cultural, it is needed to consider the functions of periodic markets from the aspects of both traders and consumers. Main finding in this study is that the periodic market located in higher-order center has expanded in size, while most periodic markets in lower-order centers have declined. It seems that social inertia and comparative advantage which have supported the existence of periodic markets gradually disappear. These socioeconomic changes which resulted from the modernization have brought about the decline of periodic markets.

**Key Words :** periodic market, trader, consumer, central function, social inertia, comparative advantage

**요약 :** 본 연구의 목적은 정기시장을 이용하는 이동 상인과 소비자의 특성을 분석하여, 정기시장의 중심지 기능과 공간 구조를 이해하려는 것이다. 충청북도 영동군 지역을 사례로 해서 8개의 정기시장을 이용하는 상인에 대한 면접 조사와 소비자에 대한 설문 조사를 통해서 자료를 수집하였다. 정기시장의 연구는 경제-입지적 접근 방법이나 사회-문화적 접근 방법으로 행해지지만, 정기시장의 기능을 상인과 소비자의 두 측면에서 모두 고려할 필요가 있다. 본 연구에서 고차위 중심지에 위치한 정기시장은 규모가 커진 반면, 저차위 중심지에 위치한 정기시장은 쇠퇴하고 있는 것이 확인되었다. 정기시장을 유지시켜 왔던 사회적 관성과 비교 우위는 농촌의 근대화 과정에서 점차 사라지고 있으며, 이러한 사회경제적 변화가 정기시장을 쇠퇴시키고 있다.

**주요어 :** 정기시장, 이동 상인, 소비자, 중심지 기능, 사회적 관성, 비교 우위

## 1. Introduction

### 1) Purpose of the study

Korea has a long history in the periodic market system. It is believed that periodic markets in Korea had already existed during the Three Kingdoms Period (313 A.D. - 668 A.D.) (Lee, 1988, 45-48; Lee and Hong, 1992, 64-66). However, a number of periodic markets have disappeared during the last 20 years due to the modernization of the country.

There were 1,032 periodic markets in 1970, but only 541 periodic markets survived by 1996. Nevertheless, existing periodic markets still play an important role in trade activities of rural communities.

Most approaches in periodic market research can be divided into two groups: economic-locational approach and socio-cultural approach. While the former as shown in Stine (1962), Skinner (1964a, 1964b), Hay (1971), Webber and Symanski (1973), Ghosh (1981; 1982), Jeon (1983) focuses on

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economic or spatial aspects of the periodic market system with the application of central place theory, the latter as shown in Hill (1966) emphasizes the factors such as traditional institution and social inertia in regard of the existence of periodic markets. However, the economic-locational approach was predominant in explanation of periodic markets, and socio-cultural functions of periodic markets were not the main themes in most research. In order to understand trading institutions thoroughly, not only economic processes but also the social context and historical development of trade activities must be probed (Bromley, Symanski and Good, 1975, 530-531).

However, these two approaches were usually discussed in the aspect of traders and the organizing systems of periodic markets (Morikawa and Sung, 1985, 95). The role of consumers in the periodic market system is as important as that of traders, but this fact have been neglected often in the early research on periodic markets. Recently, there were several studies on Korean periodic markets, which analyzed the periodic markets from both aspects of traders and purchasers (Morikawa and Sung, 1985; Sung, Han, Joo, and Kim, 1998). Also, Ishihara (1987; 1988) analyzed the periodic markets from both aspects of traders and purchasers in his studies on markets of South India and Bangladesh.

The periodic market systems in Korea retain important social dimensions as well as economic dimensions. However, the existence and continuance of periodic markets is attributable to the activities of traders and purchasers. In order to understand better the structure and changes of periodic market system, it is needed to consider the functions of periodic markets from the aspects of both traders and consumers. The purpose of this study is to analyze the characteristics of traders and consumers visiting rural periodic markets so as to understand both economic and social functions and spatial structure of periodic markets.

## 2) Methodology

This study analyzes the functional and spatial characteristics of periodic markets as a case study on Youngdong County in Korea. The county is located in the central area of South Korea and in the southernmost area of the Chung-Cheong-Buk-Do(Chungbuk) province (Figure 1). This area was chosen for the present study because it has been an agricultural area without having any large city and there are still several well-operating periodic markets. As seen in Table 1, the only town in the county is Youngdong Town (*eup*), a county seat which had a population of 22,337 in 1995, and it still holds a large-scale periodic market though there is a permanent market near to it. The total population of the county has been steadily decreasing; it was 110,506 in 1970, but 62,002 in 1995. The whole area of the county is 844.99km<sup>2</sup> and the population density is 73.4 persons/km<sup>2</sup>. In 1995, the percentage of farm population in the county area was 51.5%, which indicates that the county economy was generally based on agriculture.

Periodic markets in Korea, each of which is called '*jang*', open regularly every fifth day. The specific market dates vary from place to place. A first-day market, for example, opens on the 1st, 6th, 11th, 16th, 21th, and 26th days of the month. There are eight periodic markets in Youngdong County, as seen in Table 2. However, Simcheon-*jang* was not functioning normally because only one traveling merchant usually showed up on the market dates.

This study collected data from field interviews with traders and questionnaires to consumers in eight periodic market areas located in Youngdong County in 1997<sup>1)</sup>. Although some merchants refused to be interviewed, many of the traveling merchants were willing to answer to the questions. Especially, merchants in small markets were very cooperative because there were not so busy. After all, about 60 percent of the total traders in Youngdong County

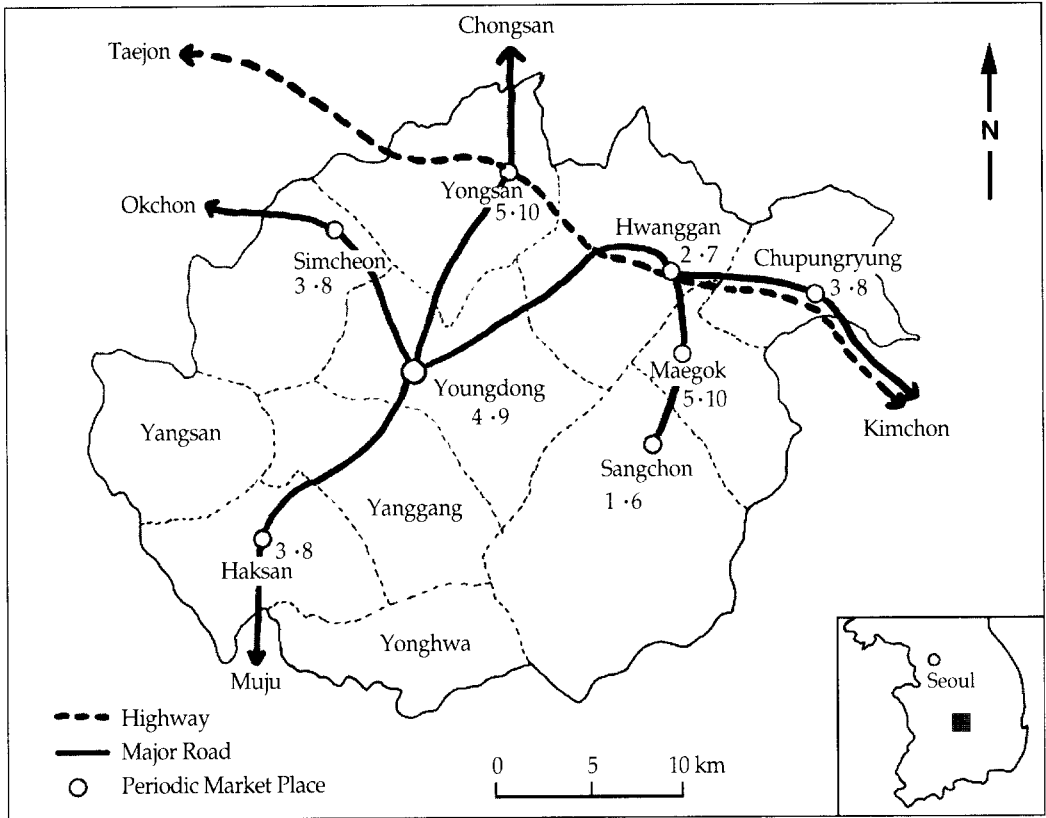


Figure 1. Periodic market places in Youngdong County, Korea

\* The numbers by the mark places indicate the periodic market dates.

Table 1. Population and areas of townships in Youngdong County (1995)

Township ( <i>eup, myon</i> ) <sup>1</sup>	Area (km <sup>2</sup> )	Population Density (persons/km <sup>2</sup> )	Population			Farm Population (%)
			1970	1995	1970-1995 Change (%)	
Youngdong ( <i>eup</i> )*	100.19	222.9	26,324	22,337	-15.1	21.5
Yongsan*	66.87	74.5	9,915	4,981	-49.8	66.6
Hwanggan*	90.22	71.3	10,492	6,434	-38.7	54.5
Chupungryung*	55.21	66.7	7,005	3,683	-47.4	56.9
Maegok*	45.24	62.5	7,059	2,826	-60.0	71.1
Sangchon*	137.52	25.0	7,855	3,432	-56.3	75.4
Yanggang	81.94	53.7	10,104	4,404	-56.4	77.2
Yonghwa	59.33	21.8	4,162	1,296	-68.9	85.0
Haksan*	73.48	64.3	10,631	4,728	-55.5	73.3
Yangsan	57.13	51.2	6,278	2,926	-53.4	79.6
Simcheon*	77.86	63.6	10,681	4,955	-53.6	67.4
County Total	844.99	73.4	110,506	62,002	-43.9	51.5

1. There are two types of township under a county (*gun*) in Korea; *eup* is an officially designated town and *myon* is a designated subdivision for a less populated countryside. Youngdong *eup* is the only town in Youngdong County.

\* This indicates a township (*eup* or *myon*) holding a periodic market.

**Table 2. The number of traveling merchants interviewed and consumers responded (1997)**

Periodic markets ( <i>jang</i> )	Market dates	Traveling merchants interviewed	Consumers responded
Youngdong	4 · 9	81	74
Yongsan	5 · 10	17	51
Hwanggan	2 · 7	24	79
Chupungryung	3 · 8	11	49
Maegok	5 · 10	4	42
Sangchon	1 · 6	13	44
Haksan	3 · 8	8	66
Simcheon*	3 · 8	0*	57
Total		158	462

\* There is usually one merchant showing up on the market day, but he was absent on the day surveyed.

were interviewed (Table 3 shows that the total traders in Youngdong County numbered 262 in 1997).

Consumers were selected from residents of the market areas, who were parents of the pupils in the middle school of the same market area. The questionnaires distributed to the parents of the pupils were collected after several days by the help of school teachers. The return rate of questionnaires was about 91 percent.

The data collected by these surveys were analyzed to know the characteristics of traveling merchants and purchasers. First, this study probed

**Table 3. Changes in the number of traveling merchants**

Periodic markets ( <i>jang</i> )	1980 *	1990 **	1997 ***
Youngdong	233	121	160
Yongsan	59	15	21
Hwanggan	65	45	35
Chupungryung	61	17	11
Maegok	43	26	5
Sangchon	70	30	18
Haksan	66	48	11
Simcheon	55	21	1
Yangsan	45	closed in 1989	
Total	697	323	262

Sources : \* Jeon (1983)

\*\* Youngdong County (1991, 897)

\*\*\* Survey by the author in 1997

the characteristics of merchants such as socioeconomic background, residential area, market connectivity and cycle. Second, this study illuminated the characteristics of consumers such as socioeconomic background, shopping behavior, and ancillary functions of periodic markets.

### 3) Historic changes of periodic markets in Youngdong County

The number of periodic markets in Youngdong County has been changed since 1926 when there were 6 markets. In 1938, the number of markets increased to 7 and in 1964, it became 10. After that, one market (Yongwha-*jang*) was closed in 1974 and another (Yangsan-*jang*) was closed in 1989. Now there are 8 periodic markets officially, but only 7 markets are actually existing because there is almost no trader visiting Simcheon-*jang*.

The number of traveling merchants has also decreased since the 1970s. Table 3 shows that the number of traders visiting periodic markets decreased rapidly during the 1980s from 697 to 323. Although the total number of traders in Youngdong County decreased from 323 to 262 during the 1990s, the number of traders in Youngdong-*jang* has increased from 121 to 160. While most local markets lost traders, central market like Youngdong-*jang* gained traders. These changes seem to indicate the tendency that the periodic market in higher-order center grows larger and that in lower-order center declines. This tendency reflects the effect of innovation in transportation mode. Improvement in transportation mode such as owner-driving automobiles made traders and villagers travel farther to the central market to sell and purchase various items instead of visiting local markets. The recent increase of traders in Youngsan-*jang* that located close to the highway interchange is also attributed to the transportation improvement.

## 2. Characteristics of traveling merchants

### 1) Socio-demographic background of traders

Among 158 traders who were interviewed in the seven periodic markets of Youngdong County, male traders numbered 60 (38%) and female traders numbered 98 (62%). The reason why female traders outnumbered males is mainly that many female traders are housewives who attend the periodic markets opened in their residential areas only to sell the surplus agricultural products and they actually do not travel to other periodic markets. The survey also revealed that traders were pretty old; 60.1 percent of traders were in the age group of fifties and over. Only 11.4 percent of traders were in their thirties, and traders younger than thirty years old comprised less than 2 percent of the total traders interviewed. Since many of traders were old, their educational level was pretty low; 50.6 percent of traders were elementary school graduates or in lower educational level. Only 4 traders were college graduates.

Of the total 158 traders, 113 were full-time traders who comprised 71.5 percent; the rest (28.5%) were part-time traders whose primary occupation is mostly farming. The prior or current primary occupations of the traveling traders were various, but 31.6 percent of them were farmers and 21.5 percent were housewives. Others were engaged in such occupations as commercial business (15.8%) office work (8.9%), and so on. But some of them (10.1%) had 'no job' before they became traveling traders, and some (5.7%) did not answer. Their careers as traveling traders were generally long; 75.4 percent of them have experiences longer than 6 years. 9 traders (5.7%) among them have traveled periodic markets more than 30 years.

### 2) Residences of the traders

The residential distribution of the 158 traders interviewed is summarized in Table 4. The total number of traders residing in Youngdong County is 78 (49.4%) which means that about a half (50.6%) of the traders are coming from other areas. However, in most cases, their residences are within

Table 4. Residential distribution of traveling traders

Residences Periodic Markets	Youngdong County							Other areas	Total (%)
	Young- dong	Yong- san	Hwang- gan	Chupung- ryung	Maegok	Sang- chon	Haksan		
Youngdong	28 (34.6)		1 (1.2)				4 (4.9)	48 (59.3)	81 (100.0)
Yongsan	5 (29.4)	3 (17.5)						9 (52.9)	17 (100.0)
Hwanggan	6 (25.0)		7 (29.1)		1 (4.2)	1 (4.2)		9 (37.5)	24 (100.0)
Chupungryung			1 (9.1)	3 (27.3)				7 (63.6)	11 (100.0)
Maegok			2 (50.0)		1 (25.0)	1 (25.0)			4 (100.0)
Sangchon	1 (7.7)		3 (23.1)			2 (15.4)		7 (53.8)	13 (100.0)
Haksan	7 (87.5)						1 (12.5)		8 (100.0)
Total	47 (29.7)	3 (1.9)	14 (8.9)	3 (1.9)	2 (1.3)	4 (2.5)	5 (3.2)	80 (50.6)	158 (100.0)



depends on merchandising items, size of the business, age of merchants, and transportation mode. If the traveling merchant operates his business on a full-time basis, the merchant would usually commute to three or more markets on the five-day working cycle. If the traveling merchant works on a part-time basis, the merchant would commute to three or less markets. For the days when they do not visit markets, they usually go to

larger cities to purchase merchandising items or work in their farms if they have.

If the merchants visit only one market, they are usually permanent store owners selling their overstock items or temporary traders selling their surplus agricultural products in the markets of their home areas (Figure 2c). A peasant farmer can be simultaneously a seller and buyer in the market place (Smith, 1980, 2); they purchase necessities for

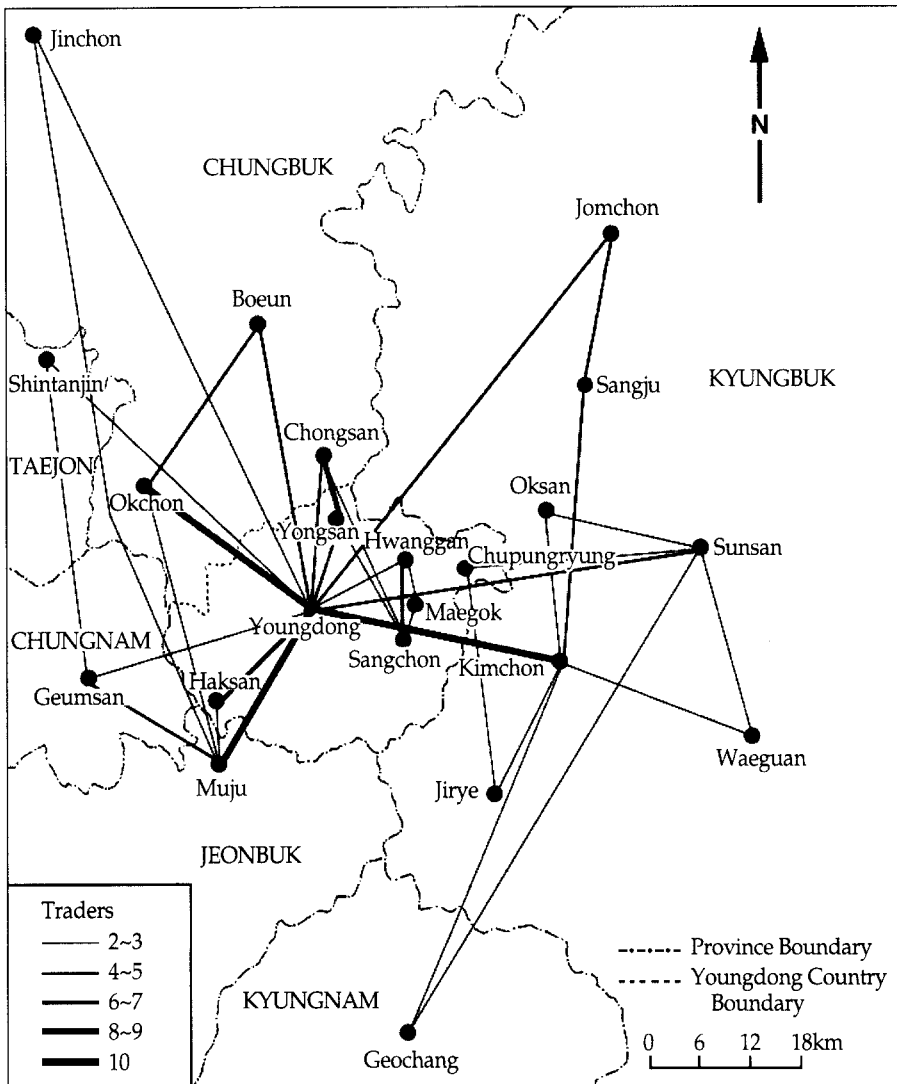


Figure 3. Connectivity of periodic markets visited by traders interviewed in Youngdong County

\* This map illustrates the market combinations responded by at least two traders in each periodic market in Youngdong County.

home in the markets at the same time when they visit markets for sale.

Figure 3 shows the spatial combinations of periodic markets visited by traders interviewed in Youngdong County. This map illustrated only the market combinations responded by at least two traders interviewed in each periodic market in Youngdong County. The routes travelled most frequently by traders were those from Youngdong to Okchon, Muju County, and Kimchon City. The routes from Yongsan to Chongsan, from Haksan to Youngdong, and from Sangchon to Hwanggan were also relatively busy routes. It is also found that some traders moves almost 100 km to visit the next periodic market as is the case of the route from Muju to Jinchon County.

The periodic market space is a property of the county government. The traders pay daily rental fee for the space they use in the market. It costs mostly 500 won to 2,000 won (about 50 cents to 2 dollars) depending on the space size. The fees are collected by managerial contractors who were authorized by the county government through open bids. However, the limited space of Youngdong-*jang* which cannot accommodate all the traders causes complications between traders using regular market space and paying rental fee and peddlers occupying street sidewalks and paying nothing. Some permanent store owners around the market place allow specific traders to use the frontages of their stores on the market dates and collect certain annual rental fees.

Their merchandizing items are various, but vegetables (22.2%) and clothes (18.4%) are most popular. Vegetables were sometimes carried by farm housewives who wanted to sell their surplus agricultural products. On the contrary, clothes were usually carried by full-time mobile clothiers using pickup trucks or vans. Other items carried by traders are usually fruits, fishes, dried fishes, underwear, socks, small hardware, and other sundry goods. Besides, cattle are traded in the

Youngdong cattle market on the same market dates as Youngdong-*jang*, and a large amount of herbs are traded in Sangchon-*jang* because it is close to high mountains where various herbs are gathered.

### 3. Characteristics of consumers

#### 1) Socio-demographic background of consumers

For the survey of consumers in Youngdong County, 462 questionnaires were collected. Of the consumers responded, male respondents comprised 38.3 percent and females 61.7 percent. This result reflects the tradition of Korea that the market shoppers are usually women and housewives. In the educational level, consumer respondents were higher than traders; only 22.7 percent of consumer respondents were elementary school graduates or in lower educational level, comparing that 50.6 percent of traders were in the same educational level.

The occupational distribution of respondents shows that 50.8 percent of the total engaged in agriculture, 22.9 percent in transportation business, 11.0 percent in commercial services, and the rest 15.3 percent in various jobs. But, among the total respondents, 68 Youngdong Town (*eup*) residents show different occupational patterns: 20.6 percent in agriculture, 38.2 percent in transportation business, 20.6 percent in commercial services, and the rest 20.6 percent in various jobs. That is because Youngdong Town (*eup*) is an urbanized town offering various service jobs.

#### 2) Market visitation patterns by consumers

Residents in Youngdong County selected in this study were questioned to give names of the periodic markets visited often by them. Each respondent was allowed to give more than one



market if he/she visits them often. Their answers were summarized in Table 5.

The periodic market visited most by residents in Youngdong County is Youngdong-*jang* which comprised 46.6 percent of the total answers. That is because Youngdong-*jang*, as a higher-order market, performs a central function by offering much more various commodities and Youngdong Town itself offers higher-order commodities and services that rural residents could purchase or utilize at the same time on the market day. Simcheon-*jang* was not visited by anybody because almost no merchant attends on the market day. Consumers in Youngdong County also visited other periodic markets located in adjacent counties or cities. Especially residents in Chupungryung visited Kimchon City (*si*) more often than Youngdong Town (*eup*) because Kimchon City is closer than Youngdong Town for Chupungryung residents. Maegok residents visit other adjacent markets more often than Maegok-*jang* because only about 5 traders attend Maegok-*jang* on the market day. Haksan residents visit not only Haksan-*jang* but

also Youngdong-*jang* and Muju-*jang* in the adjacent county.

According to this survey, the average frequency of market visitation was 2.8 times per month. Most respondents answered that the frequency of market visitation was decreased as compared with the past. They also answered that the main reason for the decrease of the market visit frequency was the increase of permanent stores. Other reasons for that were transportation improvement, village visitation by peddlers, and the increase of income. Owing to the transportation improvement and the income increase, even rural residents easily go to large cities such as Taejon and shop in some specialty stores or department stores, if they want to buy better-quality items as well as higher-order or specialty items. Because of these changes in rural society, comparative advantages the periodic markets possessed have gradually disappeared.

The first reason why consumers visit periodic markets is to purchase household necessities, according to this survey. The secondary reasons are various such as (1) to visit government offices or

**Table 5. Periodic markets visited often by consumers**

Periodic Markets Residences	Youngdong County								Other areas	Total (%)
	Youngdong	Yongsan	Hwanggan	Chupungryung	Maegok	Sangchon	Haksan	Simcheon		
Youngdong	64 (84.2)	1 (1.3)					2 (2.6)		9 (11.8)	76 (100.0)
Yongsan	41 (45.5)	42 (46.6)							7 (7.8)	90 (100.0)
Hwanggan	55 (41.7)	2 (1.5)	57 (43.1)		4 (3.0)	1 (0.7)			13 (9.8)	132 (100.0)
Chupungryung	7 (8.8)			36 (45.0)					36 (45.0)	80 (100.0)
Maegok	23 (35.9)	1 (1.4)	17 (23.6)		12 (16.7)	16 (22.2)			3 (4.2)	72 (100.0)
Sangchon	23 (35.9)			2 (3.1)		39 (60.9)				64 (100.0)
Haksan	57 (50.4)						40 (35.3)		16 (14.2)	113 (100.0)
Simcheon	50 (84.7)					1 (1.8)	1 (1.8)		7 (11.9)	59 (100.0)
Total	320 (46.6)	46 (6.7)	75 (10.9)	38 (5.5)	16 (2.3)	57 (8.3)	43 (6.3)	0 (0.0)	91 (13.3)	686 (100.0)

**Table 6. Transportation modes of traders and consumers**

visitors \ modes	pickup truck	bus	van	passenger car	on foot	cart	rototiller	train	Total
Traders (%)	70 (44.3)	31 (19.6)	25 (15.8)	11 (7.0)	9 (5.7)	7 (4.4)	3 (1.9)	2 (1.3)	158 (100.0)
visitors \ modes	cars*	bus	on foot	autobike	bicycle	rototiller	taxi	train	Total
Consumers (%)	159 (32.4)	157 (32.0)	84 (17.1)	50 (10.2)	26 (5.3)	10 (2.0)	2 (0.4)	1 (0.2)	489** (100.0)

\* Cars for consumers include truck, van, and passenger car.

\*\* Since several respondents answered more than one transportation mode, this number is higher than the total number of respondents, 462.

financial institutions such as Agricultural Association's bank in Youngdong Town, (2) various merchandising items sold in the market, (3) to sell agricultural products, (4) recreational pastime, (5) information acquisition and social intercourse. Among the total respondents, 60.4 percent were consumers as well as producers of agricultural products, and some of them sell a portion of their products in the periodic markets. Also the reasons (4) and (5) indicate that social functions of periodic markets are considerably important. However, such social inertia that have supported the persistence of the periodic markets is becoming weak because of the changes in rural life style and loosened social ties among villagers.

### 3) Transportation

The changes in transportation mode affected periodic market system in various ways. Until 1970s, most traders and shoppers visiting periodic markets used public buses and trains for long distance transportation. For short distance transportation, they went on foot or by bicycle, and sometimes they pulled carts for larger carriage. Nowadays, the most popular transportation mode of the traders is the pickup truck, which comprised 44.3 percent of the total traders interviewed (Table 6). Also Table 6 shows that owner-driving automobiles such as pickup trucks, vans and passenger cars comprise 67.1 percent of the total transportation modes used by traders. If they do

not carry large and heavy items, they can use public buses or go on foot.

On the contrary, consumers use cars (including trucks and vans) and buses in almost same frequency rate, 32 percent of the total answers. Also many consumers go to market on foot or by autobike and bicycle. Some people use rototiller, taxi, or train.

## 4. Conclusions

This study analyzed the characteristics of traders and consumers visiting periodic markets so as to understand central functions and spatial patterns of periodic markets. Since this study considered the economic and social functions of periodic markets from the aspects of both traders and consumers, it contributed to understand better the structure and changes of periodic market system.

From this study of the periodic markets in Youngdong County, a two-level market hierarchy is found; Youngdong-jang is higher-level market and others are lower-level market. Youngdong-jang performs a higher-order central function by offering relatively more various kinds and a large quantity of commodities to consumers in the town and rural areas. Such hierarchy is also confirmed by the number of traders visiting the periodic markets.

Main finding in this study is that the periodic market located in higher-order center (like Youngdong Town) has expanded in size, while

most periodic markets in lower-order centers have declined. These phenomena resulted from the transportation improvement (like highway system and automobile system), the decrease in rural population, the improvement in distribution system of agricultural products, and the emergence of modern commercial facilities. These changes in the periodic market system are mainly due to the innovation of the modern Korean society.

Socioeconomic functions of periodic markets were also affected by such modernization process. From the result of this study considering both economic aspects and socio-cultural aspects of periodic markets, it seems that social inertia and comparative advantage which have supported the existence of periodic markets gradually disappear. These socioeconomic changes which resulted from the modernization have brought about the decline of periodic markets as well.

### Acknowledgement

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### Note

1) The dates in 1997 of field surveys on traveling merchants were March 26 for Sangchon, March 27 for Hwanggan, October 5 for Yongsan and Maegok, October 18 for Chupungryung, Haksan, and Simcheon, and October 19 for Youngdong.

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## Appendix



1. Periodic Market in Youngdong Town, Youngdong County



2. Periodic Market in Hwanggan, Youngdong County