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A FOLLOW-UP SURVEY ON THE MARKETING MARGIN OF SOME VEGETABLES AND FRUITS IN KOREA

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I. Introduction

The plan for marketing margin reduction of agricultural products has always been one of the main tasks of agricultural policies in Korea. Thereafter there has been a number of studies and analyses on marketing margin, and several measures have been proceeded and carried out. But the price of agricultural products fluctuates widely and frequently according to the season, therefore the issues concerning high marketing margin of agricultural products are reported frequently in papers and broadcasting.

The matter of primary concern and interest in agricultural marketing may be as follows : while the producers receiving price is generally negligible, how do the urban consumers purchase at the price which is many times over the producers' receiving one? Commonly it is said to be because the structure of marketing is inefficient and the marketing firms make unreasonable profits.

If marketing margin is excessive, the reason may be either that there has been too much marketing cost generated beyond the compensation which is needed for the due marketing functions of marketing system, or that too much marketing functions have been performed, or the marketing system which performs those functions has taken excessive profits. If not, it may be a misunderstanding about the fact that as a matter of the character and feature of agricultural

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marketing, there occurs as much marketing margin of agricultural products. Before we conclude the marketing structure to be inefficient on the ground of high marketing margin, it is necessary that we analyse the marketing margin correctly.

In this viewpoint, this study has examined the meaning of marketing margin of agricultural products for a start, and made an attempt at a follow-up survey on some representative vegetables and fruits. As for these vegetables and fruits, because the functions of the assemblers in producing areas are prominent and the proportion of marketing volume which is traded through quasi-markets channel is rather high, it is generally recognized that the marketing margin of these items are high. The purpose of this study, which is on an actual proof and field feeling from the follow-up survey, is to attempt to evaluate the details of marketing margin structure, and to examine the factors which bring about the high marketing margin through the analyses on the composition of marketing margin.

II. The Meaning of the Marketing Margin of Agricutural Products

The marketing margin of agricultural products is generally said to be the cost that is attended with all the economic activities which make it possible to transfer the ownership of agricultural products and actually distribute them from producers to consumers. According to the common definition by most of scholars, marketing margin is the difference between what the consumer pays for food and what the producer receives(Kuan, W. D., 1988: 119~123, Kohls, R.L. et al., 1980: 221~222). This includes the pure marketing expenses for performing marketing functions and also the marketing firms' profits[1].

As the income level rises, the consumption pattern on agricultural products has also changed from the quantity increase to the high quality and diversity. Owing to the high income level, consumers are apt to prefer foods which are high in quality and have

[1] marketing margin = consumer paying price - producer receiving price = marketing cost + profits

diverse services. Therefore, such patterns of food consumption may continue to go on. Also, the development of social infrastructure, transportation facilities, and so forth facilitates more and more long distance transportation, and the development of the technology for storage · refrigeration · cold-storage makes the supply of agricultural products consistent all the year round.

With economic development, the demand on marketing services for storage · processing · refrigeration · cold-storage is bound to increase. So the marketing margin which is attended with the performance of those services cannot but increase. Especially, because agricultural products are bulky though low-priced, not only are their costs per unit bound to be high but the freshness of products drop severely as time goes by. To compensate for these, the marketing firms cannot but amplify their profits. Consequently, the marketing margin will continuously become larger and larger in the future.

There are several methods in measuring the marketing margin by items. One of them we can think of is the follow-up survey which examines the same products from producers to consumers. It has the advantage that it can minutely survey the actual costs for every point of marketing functions and get hold of the loss or the excess profit which might occur in the course of marketing. In this method, however, there is a possibility of a lack in generality. That is to say, not only the costs are apt to become different with the marketing channels, but there can be a difference between the areas of production and consumption, and there can be a difference between the time of production and marketing · consumption.

Therefore, this method is useful enough as a case study, but it is not sufficient enough for a practical and general index on marketing margin. It wouldn' t be realistic to measure marketing margin by considering every area and time of the one time marketing amount of the individual product(Sung, B. Y. et al., 1993: 16~17). And the changes in margin accompanied with the changes in demand condition at the time the marketing begins and terminates can be calculated irrespective of the costs.

On the other hand, we can also measure a general marketing margin at the same point of time by calculating the price spreads per each marketing stage and the cost of marketing services expected. By excluding production amounts from the final consumers' expenditure

of the products which have been produced and consumed for a given period of time, and then by dividing that with marketing volume, we can calculate the marketing margin per unit. And if that margin can measure the costs by items in the course of marketing, this method may be the most general one for the measurement of cost and margin. In this method, however, there are some weak points that the products themselves cannot be the same during the course of marketing and the storage cost can not be measured precisely.

III. A Follow-up Survey on the Marketing Margin of Some Vegetables and Fruits

1. The Design of Survey

1.1. List of Items and Marketing Channels

This study has selected the following four items among vegetables and fruits as objects of survey ; white cabbage, garlic, potato, apple, etc. As for white cabbage, garlic and potato, it is generally recognized that the marketing margin of these items are high because the functions of the assemblers in producing areas are prominent and the proportion of marketing volume which is traded through quasi-markets channel is rather high in Korea. Apple is one of the items which are marketed in plenty through direct transaction. And the marketing channel this study has surveyed for white cabbage, garlic, and potato is the channel of "producer→assembler→wholesaler→retailer→consumer" which is the most general one for vegetables and fruits. As for apple, the direct transaction channel of "producer→consumer" was used.

1.2. Survey Method

The survey method this study has taken is the follow-up survey which is useful enough as a case study, though that method is not sufficient enough for a practical and general index on marketing margin. As stated above, the follow-up survey which examines the same products from producers to consumers by marketing channels has the

advantage that for every point of marketing functions it can minutely survey the actual costs and get hold of the loss or the excess profit which might take place in the course of marketing.

1.3. Survey Time and the Method of Data Gathering

In order to gather fresh and vivid data, the survey time this study has taken is immediately after the active shipping time of each of the vegetables and fruits. The data were gathered through field survey and the samples were surveyed through a form of interview for accuracy and speed.

1.4. Survey Area and Contents

For producers and assemblers, and for wholesalers and retailers, the chief producing centers and Seoul have respectively been taken as the survey areas in order to improve the representativeness of survey. The main contents of the survey are the details of the transaction costs by marketing costs per transaction units. Transaction volume, transaction partner, transaction method and other complementary data about

TABLE 1 The Design of Survey

List of Items	Kinds	Grades	Marketing Channels	Survey Methods	Survey Time	Survey Areas
White Cabbage	Konengji	superior medium	producer → assembler → (on farm sale) wholesaler(purchase) → retailer → consumer	follow-up survey	Oct. 1996	Pyeongchang → Seoul
Garlic	Hanji	〃	producer → assembler → (farm gate sale) wholesaler (consignment) → retailer → consumer	〃	〃	Wouseong → Seoul
Potato	Sumi	〃	producer → assembler → (on farm sale) wholesaler(purchase) → retailer → consumer	〃	〃	Pyeongchang → Seoul
Apple	Huji	〃	producer → consumer (direct transaction)	〃	Feb. 1997	Yeongpung → Seoul

marketing costs are also included in the contents.

2. The Results of Survey

All the results of this survey are specified in the order of marketing stages from producers to consumers. In the preparation of tables, attention was given to the fact that they could be compared with the details of the costs per unit. Since these results were prepared by the follow-up survey which examined the same products from producers to consumers by marketing channels, actual costs have been minutely surveyed for every point of marketing functions, and also minute details of the loss or the excess profit which might take place in the course of marketing were surveyed.

2.1. White Cabbage

The follow-up survey on white cabbage has been performed in October, 1996. Konengji, one of the types of white cabbage which is cultivated in the cool highlands of Korea, was selected for the survey. The surveyed marketing channel is the course of "producer→assembler→wholesaler→retailer→consumer", where white cabbage is transacted by the on farm sale and the wholesaler transacts through its purchase. As the survey areas for the chief producing centers and the wholesale→retail stage, Pyeongchang-kun, Kangwon-do and Seoul have been taken, respectively. And the selected grade of white cabbage for the survey is superior-medium.

In the course of "producer→assembler", the Konengji white cabbage is transacted per pyung by the transaction method of the on farm sale. Brokers intervene in that course, and fees equivalent to 1 per cent of the total transaction amounts occur. Though the price per kilogram which producer has received from assembler is 179.9 won, the producer receiving price after excluding the fee is 178.1 won(Table 2).

The assembler in producing areas who has bought the Konengji white cabbage through the on farm sale, puts 15,000 won for shipping into the stuff cost for old newspapers etc., 150,000 won into harvesting · sorting · packaging costs per truck of 7 tons. Paying 250,000 won for transportation cost per truck, he sells it to the wholesaler(of the type of

purchase) on Kyeongdong market in Seoul. Besides the transportation cost, he also bears 50,000 won for loading and unloading costs, 20,000 won for scavenging cost, 30,000 won for traveling and reception expenses, etc. In the course of transfering it to the wholesaler, about 10 per cent of the purchased volume decreases and is wasted. As this assembler carries out the on farm sale, there is no cost related to store. But there are some other costs such as labor cost and management expenses, etc. This assembler has received 2,235 thousand won for the sale price of a truck of the Konengji white cabbage from the wholesaler(of the type of purchase). And the profits of the assembler are 250 thousand won per truck(35.7 won per kg), excluding 1,259 thousand won for purchasing products and 726 thousand won(103.7 won per kg) for all the marketing costs.

The wholesaler who has purchased the Konengji white cabbage from the assembler, bears 25 won per head for re-sorting and re-packaging costs, 10,000 won per 2,500 heads for loading and unloading costs, 5,000 won per 2,500 heads for scavenging cost, and 20,000 won per 2,500 heads for traveling and reception expenses. In addition to these, after he reckons up the amounts corresponding to 5 per cent level of the purchased volume for decrease and waste, and some amounts for other costs such as labor cost and management expenses, he sells it to a retailer at a cost of 93.5 won per kg for the total marketing costs. The wholesale market fees for market company which amounts to about 7 per cent of the total sales is also included in his marketing costs. This wholesaler has purchased the Konengji white cabbage at 1,197 thousand won per 2,500 heads(2,235 thousand won per truck), and sold to retailer at 1,665 thousand won. Therefore he has shared the profits of 117 thousand won per 2500 heads(31.1 won per kg), exclusive of 351 thousand won per 2,500 heads for all the marketing costs.

As a retailer sells the Konengji white cabbage to a consumer in a vinyl bag to be able to package a 5.6 kg volume, there is some stuff cost which amounts to 3.6 won per kg. He bears 10.0 won per kg for the transportation from the wholesale market and the delivery to consumer. Also because about 10 per cent of the purchased volume decreases and is wasted, the decrease and waste amounts to 44.3 won per kg. In addition to these, he disburses rent, labor cost and other costs related to store. Consequently, the total marketing costs of this

TABLE 2 The Result of Follow-up Survey on Marketing Margin of White Cabbage

Marketing Channels	Marketing Margin	Amounts (won/kg)	Contents
Producer	(producer receiving price)	(178.1)	
↓	fee	1.8	1% of the total transaction amounts (to pay to the on farm sale broker)
Assembler	Subtotal	1.8	
	(producer sales price)	(179.9)	
Assembler	harvesting, sorting, packaging costs	21.4	150,000 won per truck of 7 tons
	stuff cost	2.1	15,000 won per truck(old newspapers, etc.)
	loading and unloading costs	7.1	50,000 won per truck
	transportation cost	35.7	250,000 won per truck
	scavenging cost	2.9	20,000 won per truck
↓	traveling and reception expenses	4.3	about 30,000 won per truck
	decrease and waste	18.0	10% level of the purchased volume
	other costs	12.2	labor cost and management expenses, etc.
	profits	35.7	targeting 250,000 won per truck
Wholesaler	Subtotal	139.4	
	(assembler sales price)	(319.3)	about 2,235 thousand won per truck
Wholesaler	sorting, packaging costs	16.7	25 won per head of 1.5kg
	loading and unloading costs	2.7	10,000 won per 2,500 heads
	scavenging cost	1.3	5,000 won per 2,500 heads
	traveling and reception expenses	5.3	20,000 won per 2,500 heads
	market fee	31.1	7% of the total sales amounts
↓	decrease and waste	16.0	5% level of the purchased volume
	other costs	20.4	rent, labor cost and management expenses, etc.
	profits	31.1	7% of the total sales amounts
Retailer	Subtotal	124.6	
	(wholesale price)	(443.9)	
Retailer	stuff cost	3.6	20 won for a vinyl bag to package 5.6kg vol.
	transportation cost	10.0	10,000 won per 1ton truck(delivering cost)
	decrease and waste	44.3	10% level of the purchased volume
↓	the other costs	17.9	rent, labor cost and management expenses, etc.
	profits	44.3	10% of the purchased amounts
Consumer	Subtotal	120.1	
	(consumer paying price)	(564.0)	846 won per head

retailer sum up to 75.8 won per kg. It was surveyed that this retailer had purchased the Konengji white cabbage at 1,665 thousand won per 2,500 heads(665.9 won per head), and sold to consumer at 846 won per head. Therefore, his profits per head amount to 66.5 won which corresponds to about 10 per cent of the purchased amounts, exclusive of 113.7 won(75.8 won per kg) for all the marketing costs.

2.2. Garlic

The follow-up survey on garlic has been performed in October, 1996, by selecting the kind called Hanji which is cultivated in the cool areas in Korea as a subject for the survey. The surveyed marketing channel is the course of "producer→assembler→wholesaler→retailer→consumer", where garlic is transacted by the farm gate sale and the wholesaler deals with it by the consignment from the assembler. As the survey areas for the chief producing centers and the wholesale stage, Wouseong-kun, Kyeongsangbuk-do and Garak-dong wholesale market in Seoul have been taken respectively. And the selected grade of garlic for the survey was superior-medium.

The producer puts 32,000 won per pack of 100 hundred bulbs into harvesting · sorting · packaging · stuff costs for shipping the garlic which has been produced in his farm. And as the items of drying cost in order to dry garlics which are yet to be dried, he spends 10,000 won per 100 hundred bulbs for that labor cost. Brokers also intervene in that course, and fees equivalent to 1 per cent of the total transaction amounts occur. Consequently, the producer receiving price per pack of 100 hundred bulbs is 403.5 thousand won after excluding 46.5 thousand won for all the costs, though the price which he had received from the assembler was 450 thousand won(Table 3).

The assembler who has bought garlic at the producer's farm gate makes his transaction with a wholesaler in Garak-dong wholesale market with a request of consignment for sale, after he put 33,000 won per 100 hundred bulbs into sorting · packaging · stuff costs to re-sort and put in nets. In the course of consignment sale, there are several marketing costs such as transportation cost, loading and unloading costs, traveling and reception expenses, etc. He spends 175,000 won per truck of 5 tons for the average transportation cost, and 30,000 won for the traveling and reception expenses. Also, he

TABLE 3 The Result of Follow-up Survey on Marketing Margin of Garlic

Marketing Channels	Marketing Margin	Amounts (won/kg)	Contents
Producer - Assembler	(producer receiving price)	(1,008.6)	4,035 won per pack of hundred bulbs of garlic(≒4.0kg)
	harvesting, sorting, packaging costs	75.0	30,000 won per 100 hundred bulbs
	stuff cost	5.0	packaging stuff cost(20 won per hundred bulbs)
	drying cost	25.0	10,000 won per 100 hundred bulbs for labor cost
	fee	11.2	1% of the transaction amounts to pay to broker
	Subtotal	116.2	
	(producer sales price)	(1,124.8)	450,000 won per 100 hundred bulbs
Assembler - Wholesaler	sorting, packaging costs	75.0	about 30,000 won per 100 hundred bulbs
	stuff cost	7.5	20~30 won per net of a hundred bulbs
	loading and unloading costs	12.5	50 won per pack of hundred bulbs
	transportation cost	35.0	150~200 thousand won per truck(5 ton)
	traveling and reception expenses	6.0	30,000 won per truck
	consignment fee	124.0	8% of the total sales amounts
	decrease and waste	22.5	2% level of the purchased volume
	other costs	17.7	labor cost and management expenses, etc.
	profits	125.0	500won per a hundred bulbs
	Subtotal	425.2	
	(assembler sales price)	(1,550.0)	
Wholesaler - Retailer	consignment sales		
	(wholesale price)	(1,550.0)	
Retailer - Consumer	stuff cost	3.5	30~40 won per a 10 kg net
	unloading cost	7.5	30 won per a hundred bulbs
	transportation cost	10.0	10,000 won per a bicycle cart(1ton loading)
	decrease and waste	38.8	2~3% level of the purchased volume
	other costs	54.8	rent, labor cost and management expenses etc.
	profits	155.0	about 10% of the purchased amounts
	Subtotal	269.6	
	(consumer paying price)	(1,819.6)	7~7.5 thousand won per a hundred bulbs

bears 50 won per a hundred bulbs for loading and unloading costs, 496 won(8 per cent of the total sales amounts) for the consignment fee which the firm in the wholesale market takes away. And he expends 2 per cent level for the rate of decrease and waste.

This assembler has bought garlic at 450 thousand won per 100 hundred bulbs from the producer, and received 620 thousand won for the sale price from the wholesaler. He expends 170 thousand won that equals the difference between the two prices at the marketing costs which has been examined until now, and other costs such as labor cost etc., and at his profits. The amounts of the profits are 50 thousand won per 100 hundred bulbs.

As the marketing channel of "wholesaler→retailer" is a consignment sales stage where the wholesaler deals with garlic by the consignment from the assembler, the wholesaler sells at 1,550.0 won per kg and disburses the same price to the assembler. The wholesaler receives 124.0 won per kg as the consignment fee from the assembler, and allots it in his marketing costs and profits.

It was surveyed that the retailer had bought garlic at 6,200 won per pack of hundred bulbs, and sold to consumers at 7,278.4 won. So the marketing margin in the stage of "retailer→consumer" is 1,078.4 won per pack of hundred bulbs. The kind of marketing costs which the retailer bears are stuff cost, unloading costs, transportation cost, decrease and waste, other costs, profits, etc. He expends 35 won per 10kg net, 70 won per pack of hundred bulbs, 2~3 per cent level of the purchased volume, 620 won per a hundred bulbs for stuff cost, unloading and transportation cost, decrease and waste, and profits, respectively. The remnants of the marketing margin in this stage is disbursed into the other costs such as rent, labor cost, management expenses, etc.

2.3. Potato

The follow-up survey on potato has been performed in October, 1996, by selecting the type called Sumi as a subject for the survey. The surveyed marketing channel is the course of "producer→assembler→wholesaler→retailer→consumer", where potatoes are transacted by the on farm sale and the wholesaler transacts through their purchase. And as the survey areas for the chief producing centers and the

wholesale→retail stage, Pyeongchang-kun, Kangwon-do and Seoul have been taken respectively. The selected grade of potatoes for the survey was superior-medium.

A producer sells potato to an assembler by the transaction method of the on farm sale. Brokers intervene in that transaction, and fees equivaient to 1 per cent of the total transaction amounts occur. The price per box of 20kg which this producer has received from assembler is 8,946 won. Consequently, the producer receiving price after excluding the fee is 8,856 won(442.8 won per kg).

The assembler in producing areas who has bought potatoes through the on farm sale, puts 63,000 won into the stuff cost for old newspapers, jute bags, braids, etc, 500,000 won into harvesting · sorting · packaging costs per 9 ton truck. Paying 250,000 won for transportation cost and 100,000 won for loading and unloading costs, he sells them to a wholesaler(of the type of purchase) on Kyeongdong market in Seoul. Though he doesn' t bear the cost related to storage, besides these marketing costs which have been examined until now, he bears not only 30,000 won for traveling and reception expenses, but also some amounts for other costs such as labor cost, management expenses, etc., and allows decrease and waste for the amount equivalent to 5~10 per cent level of the purchased volume. As the assembler receiving price from the wholesaler(of the type of purchase) is 5,900 thousand won whereas the assembler paying price is 4,025.7 thousand won per truck, the marketing margin in the stage of "assembler→wholesaler" amounts to 1,874.3 thousand won(208.2 won per kg), and the assembler' s profit is 500 thousand won(Table 4).

The wholesaler, who has purchased potatoes from the asembler, bears the costs such as loading, transportation, scavenging, wholesale market fee, decrease and waste and others, and yields his profits with the remnant of the marketing margin. To be concrete, the loading cost in the wholesale market, the trar sportation cost for delivery, and the scavenging cost are 300 won per box, 10,000 won per ton, 1,000 won per 1 ton truck, respectively. The wholesale market fee is about 7 per cent of the total sales amount, and the decrease and waste is about 3~5 per cent level of the purchased volume. Therefore, he has shared the profits of 1,500~2,000 won per box, exclusive of the other costs such as rent, labor cost, management expenses, etc.

The retailer purchased potatoes at 17,696 won per box, and sold

TABLE 4 The Result of Follow-up Survey on Marketing Margin of Potato

Marketing Channels	Marketing Margin	Amounts (won/kg)	Contents
Producer ↓ Assembler	(producer receiving price)	(442.8)	8,856 won per box of 20 kg
	fee	4.5	1% of the total transaction amounts (to pay to the on farm sale broker)
	Subtotal	4.5	
	(producer sales price)	(447.3)	8,946 won per box
Assembler ↓ Wholesaler	harvesting, sorting, packaging costs	55.6	500,000 won per 9 ton truck
	stuff cost	7.0	315 won per jute bag of 45 kg.
	loading and unloading costs	11.1	100,000 won per truck
	transportation cost	27.8	250,000 won per truck
	traveling and reception expenses	3.3	about 30,000 won per truck
	decrease and waste	33.5	5~10% level of the purchased volume
	other costs	14.3	labor cost and management expenses, etc.
	profits	55.6	500,000 won per truck
	Subtotal	208.2	
	(assembler sales price)	(655.5)	about 5,900 thousand won per truck
Wholesaler ↓ Retailer	loading cost	15.0	300 won per box
	transportation cost	10.0	10,000 won per 1 ton truck
	scavenging cost	1.0	about 1,000 won per truck
	market fee	61.9	7% of the total sales amounts
	decrease and waste	26.2	3~5% level of the purchased volume
	other costs	27.7	rent, labor cost and management expenses, etc.
	profits	87.5	1,500~2,000 won per box
	Subtotal	229.3	
	(wholesale price)	(884.8)	17,696 won per box
Retailer ↓ Consumer	transportation cost	10.0	1,000 won for 5 boxes(delivery cost)
	other costs	38.8	rent, etc. related to store
	profits	66.4	7~8% of the purchased amounts
	Subtotal	115.2	
	(consumer paying price)	(1,000.0)	20,000 won per box

to consumers at 20,000 won. His profit amounts to 1,000~1,500 won per box which is about 7~8 per cent of the purchased amount, exclusive of the delivery cost and other costs from the marketing margin.

2.4. Apple

The follow-up survey on apple has been performed in February, 1997. The surveyed kind was Huji which is the most popular one of all apples, and the surveyed grade was superior-medium. The surveyed marketing channel is the direct transaction course of "producer→ consumer", because apple is one of the typical items for which the direct transaction is prevalent between the apartment complexes in large cities and producers. Producers in farm prefer the direct transaction to the other marketing channels in order to receive a better price. Also, consumers take direct transaction because they can buy vegetables and fruits at a rather cheap prices. And as the survey areas for production and consumption, Yeongpung-kun, Kyeongsang- buk-do and an apartment complex in Seoul have been taken, respectively. Yeongpung-kun in Kyeongsangbuk-do is recently well -known as a producing area for Huji apple.

With trucks into which apple boxes have been loaded up, some of the producers come up to an apartment complex in Seoul to sell through direct transaction. Though they have put more efforts into sorting and packaging, and used high-grade stuffs, the total marketing margin is reduced considerably owing to the shortcutting of the marketing stages. They put 1,500 won into harvesting · sorting · packaging costs per box of 15 kg, 1,000 won into the stuff cost, 200 won into loading cost, and 600 won into transportation cost. The details were provided that they had expended 30,000 won per hundred boxes for traveling and reception expenses(Table 5).

Also they bear 500 won per box as a rental fee for the sales place, which is a fee given to the guard of the apartment, since they occupy the parking lot of the apartment for many hours. The consumer paying price of apples was 30,000 won on the average. Consequently, the profits level of the producers was 1,000~2,000 won per box exclusive of the other costs.

TABLE 5 The Result of Follow-up Survey on Marketing Margin of Apple

Marketing Channels	Marketing Margin	Amounts (won/kg)	Contents
	(producer receiving price)	(1,546.7)	23,200 won per box of 15 kg
	harvesting, sorting, packaging costs	100.0	1,500 won per box
Producer	stuff cost	66.7	1,000 won per box(high quality)
	loading costs	13.3	200 won per box
	transportation cost	40.0	about 600 won per box
	traveling and reception expenses	20.0	about 30,000 won per hundred boxes
↓	rental fee for sales place	33.3	about 500 won per box
	decrease and waste	77.3	5% level of the total dealing volume
	other costs	2.7	management expenses, etc.
Consumer	profits	100.0	1,000~2,000 won per box
	Total	453.3	
	(consumer paying price)	(2,000.0)	30,000 won per box

3. Analyses on the Results of Survey

In order to evaluate the results of this survey, to begin with the analysis on marketing margin rate, it was found out that those rates of white cabbage, garlic, potato and apple are 68.4, 44.6, 55.7, 22.7 per cent, respectively(Table 6, Figure 1). The rate of apple for which the direct transaction in marketing channels has been surveyed is the lowest, and the rate of white cabbage is the highest of the surveyed items. Comparing prices with marketing margin, it was also found out that the marketing margin rates of the vegetables and fruits, whose prices are high for their weight per unit, are relatively low. The reason is that relatively high sales prices compensate for the required costs even though the same level of marketing margin is required. Natural as it is from a numerical formula, the items such as apple and garlic of which marketing margin rates are low have high producer receiving rates[2]. And profits are a price which the marketing firms take as a fee for the following marketing activities. It is analysed that the profits

[2] producer receiving rate(%) = 100 - marketing margin rate(%)

rate of white cabbage, garlic, potato and apple are 19.7, 15.4, 20.9, 5.0 per cent, respectively. The rate of apple for which the direct transaction channel has been surveyed is lowest. Consequently, the analysis on the marketing margin rate indicates that the marketing margin rates of the vegetables and fruits whose marketing stages have been shortcutted, and whose prices are high compared with their weight, are relatively low.

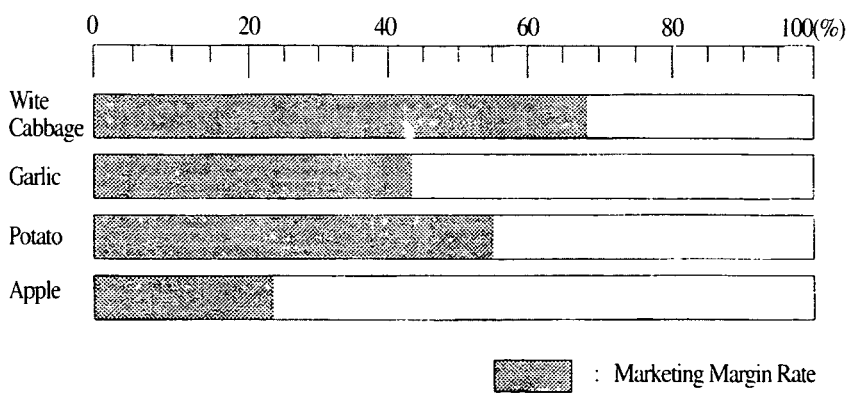
TABLE 6 Marketing Margin Rate

Unit : won/kg, %

	Producer Receiving Price	Consumer Paying Price	Marketing Margin			Marketing Margin Rate[1]		
			Marketing Costs	Profits		Marketing Costs Rate[2]	Profits Rate[3]	
White Cabbage	178.1	564.0	274.8	111.1	385.9	48.7	19.7	68.4
Garlic	1,008.6	1,819.6	531.0	280.0	811.0	29.2	15.4	44.6
Potato	442.8	1,000.0	347.7	209.5	557.2	34.8	20.9	55.7
Apple	1,546.7	2,000.0	353.3	100.0	453.3	17.7	5.0	22.7

[1] Marketing Margin Rate = (Marketing Margin/Consumer Paying Price) × 100
[2] Marketing Costs Rate = (Marketing Costs/Consumer Paying Price) × 100
[3] Profits Rate = (Profits/Consumer Paying Price) × 100

FIGURE 1 Marketing Margin Rate



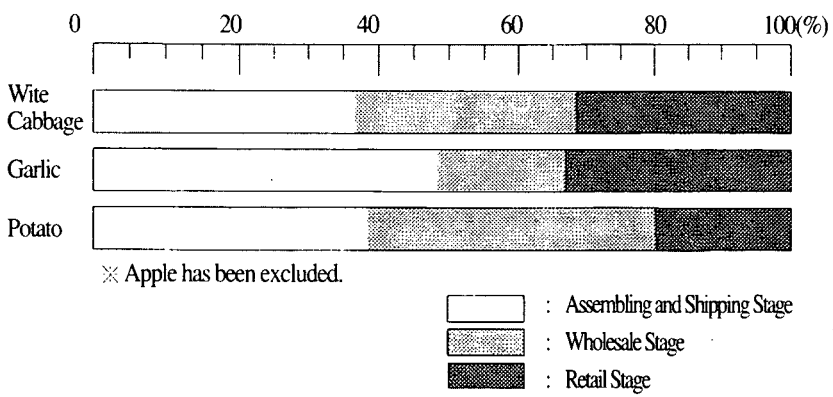
On another point of view, evaluating the statistical implication of the results of this survey by diagramming the contents of the total marketing margin into marketing stages[3], we can find out that marketing margin occurs more at the assembling and shipping stages. Especially in the case of garlic, its composition of marketing margin at this stage amounts to 48.7 per cent(Table 7, Figure 2). This is

TABLE 7 The Composition of Marketing Margin in Each Marketing Stage

Unit : won/kg, (%)

	Assembling and Shipping Stage	Wholesale Stage	Retail Stage	Total
White Cabbage	141.2 (36.6)	124.6 (32.3)	120.1 (31.1)	385.9 (100.0)
Garlic	394.9 (48.7)	146.5 (18.1)	269.6 (33.2)	811.0 (100.0)
Potato	212.7 (38.2)	229.3 (41.1)	115.2 (20.7)	557.2 (100.0)
Apple	.....(direct transaction).....			453.3 (100.0)

FIGURE 2 The Composition of Marketing Margin in Each Marketing Stage



[3] Apple is excluded in the analysis, because it has been surveyed on the direct transaction in marketing channels.

considered to be because at the assembling and shipping stages, it requires much cost in harvesting, sorting, packaging, stuff cost, loading, unloading, transportation, etc., to assemble and ship vegetables and fruits. The possibility of marketing margin reduction will be higher in the parts where marketing margin occurs more. Therefore, much concern and interest ought to be put on the assembling and shipping stages to reduce marketing margin. We should try to reduce the costs of loading and unloading, transportation among the costs of the assembling and shipping stages, because the other costs at this stage such as harvesting, sorting, packaging, and stuff cost are indispensable for marketing of vegetables and fruits. Examining this marketing margin by items, it is garlic that is found out to have the lowest rate of marketing margin composition in its wholesale stage. The reason is that it has been surveyed on the case of consignment wholesale. And the composition of marketing margin for potato in retail stage is only 20.7 per cent. The reason is that it has been surveyed on the case there had been no stuff cost, decrease and waste, contrary to the other items.

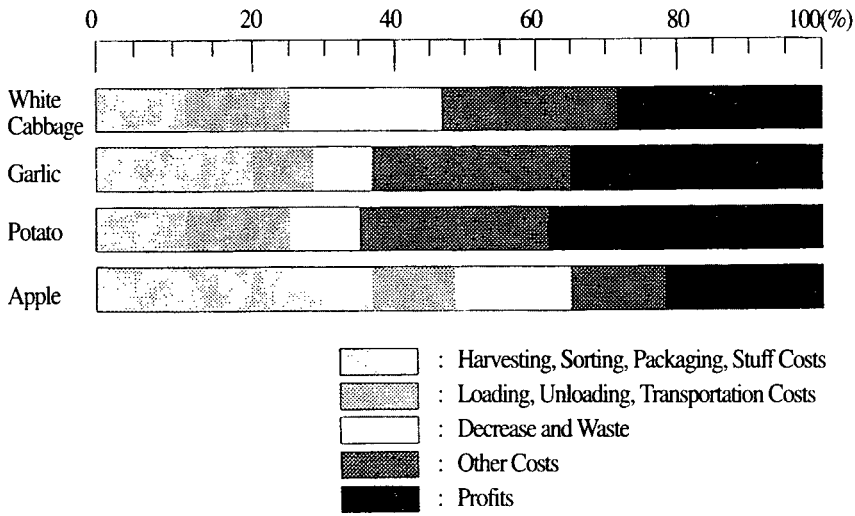
Summarizing the results of this survey by classifying the total marketing margin into marketing functions such as harvesting · sorting · packaging · stuff costs, loading · unloading · transportation costs, decrease and waste, the other costs, and profits, we can also find out that the composition of profits in marketing margin is highest for all the items

TABLE 8 The Composition of Marketing Margin by Marketing Functions

Unit : won/kg, (%)

	Harvesting, Sorting, Packaging, Stuff Costs	Loading, Unloading, Transportation Costs	Decrease and Waste	Other Costs	Profits	Total
White Cabbage	43.8 (11.3)	55.5 (14.4)	78.3 (20.3)	97.2 (25.2)	111.1 (28.8)	385.9 (100.0)
Garlic	166.0 (20.5)	65.0 (8.0)	61.3 (7.6)	238.7 (29.4)	280.0 (34.5)	811.0 (100.0)
Potato	62.6 (11.2)	73.9 (13.3)	59.7 (10.7)	151.5 (27.2)	209.5 (37.6)	557.2 (100.0)
Apple	166.7 (36.8)	53.3 (11.8)	77.3 (17.0)	56.0 (12.3)	100.0 (22.1)	453.3 (100.0)

FIGURE 3 The Composition of Marketing Margin by Marketing Functions



but apple out of this survey(Table 8, Figure 3). The sum of profits in marketing margin for white cabbage, garlic and potato occupies 28.8~37.6 per cent. And the sum of the other costs such as traveling and reception expenses, fees, management expenses, etcetera is second highest in marketing margin. The composition of decrease and waste for white cabbage, the composition of harvesting · sorting · packaging · stuff costs for garlic, and the sum of loading · unloading · transportation costs for potato are third highest, respectively. In the case of apple for which the direct transaction has been surveyed, as producers have had put more efforts into sorting and packaging, and used high-grade stuffs, the sum of harvesting · sorting · packaging · stuff costs occupies 36.8 per cent, and its profits is second highest. Therefore, according to the analysis on the composition of marketing margin by marketing functions, we can figure out that the composition of profits in marketing margin is excessive, though there are some variances from item to item.

IV. Summary and Conclusions

The plan for marketing margin reduction of agricultural products has always been one of the main tasks of agricultural policies in Korea. Hence, there has been a number of studies and analyses on marketing margin, and several measures have been proceeded and carried out. But the price of agricultural products fluctuates widely and frequently according to the season, therefore the issues for high marketing margin of agricultural products are frequently reported in papers and broadcasting.

From this viewpoint, this study has examined the meaning of marketing margin of agricultural products for a start, and made an attempt at a follow-up survey on some representative vegetables and fruits such as white cabbage, garlic, potato, apple, etc. As for white cabbage, garlic and potato, it is generally recognized that the marketing margin of these items are high because the functions of the assemblers in producing areas are prominent and the proportion of marketing volume which is traded through quasi-markets channel is rather high in Korea. Apple is one of the items which is marketed in plenty through direct transaction.

The survey method this study has taken is the follow-up survey which is useful enough as a case study, though that method is not sufficient enough for a practical and general index on marketing margin. The follow-up survey which examines the same products from producers to consumers by marketing channels has the advantage that for every point of marketing functions it can minutely survey the actual costs and also get hold of the loss or the excess profits which might take place in the course of marketing. The purpose of this study, which is on an actual proof and field feeling from the follow-up survey, is to attempt to evaluate the details of marketing margin structure, and to examine the factors which bring about the high marketing margin, through the analyses on the composition of marketing margin.

The results of the above analyses imply that for the purpose of reducing the marketing margin of vegetables and fruits, much concern and interest ought to be put in reducing marketing costs by promoting shortcutting of marketing stages, by reducing the weight of the vegetables and fruits for shipment through careful sorting and

packaging at the assembling and shipping stages, and by reducing the costs of loading and unloading, transportation, etc. The analyses also imply that it is necessary to prepare some measures to reduce the excessive profits of marketing firms.

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