# MARKETING SYSTEM OF KOREAN HERBAL MEDICINE MATERIALS

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#### I. Introduction

As not only medicines which are helpful for the health of people but also as a source of farm income, Korean herbal medicine materials (hereinafter, KHMMs) have been closely associated with our lives for a long time. But recently, owing to the IMF shock in Korea, their prices have been heavily declined accompanied by a sharp decrease in their demand. In addition to this, there have been a sudden increase in the import of foreign herbal medicine materials. Consequently, KHMMs are on the verge of a collapse of their industrial foundation.

KHMMs are the raw materials of Korean herbal medicine which is a traditional medicine science native to Korea. Their production style is changing gradually from natural collecting and assembling at fields and mountains to cultivation and production. And their supply channel from producers to consumers is classified into the process of assembling, collection, distribution and the consumption areas market. So KHMMs have a structural characteristic of the complicated marketing channel which has many stages. With many stages in the marketing process, producers' receiving price is bound to fall and consumers' paying price is bound to rise relatively.

In the process of production, KHMMs are treated as agricultural products, but in the process of consumption transaction, treated as medicinal materials. Quality and character are regarded as important in the process of their production, but in the process of

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consumption transaction, medicinal effect and ingredients as medicinal materials are so. Accordingly there can be no objective standards in their transaction process. The consumption units of KHMMs are small and dispersed, and their kinds and qualities are much diversified. The government organization which is in charge of the process of their production is Ministry of Agriculture and Forestry, but that of the process of marketing in the marketing channel of medicines is Ministry of Health and Welfare. Therefore there are considerable differences in viewpoints on KHMMs between government organizations and this fact is manifested differently to consumers and producers.

Assemblers, wholesalers, retailers, medicinal manufacturers, and real consumers, etc. exist in the marketing process of KHMMs from the above-mentioned conditions related to them. The process of their marketing is complicated. Consequently much marketing costs are put in, and middlemen can easily corner and hoard. Because their marketing stages are intertwined together, and because their marketing channels are not known objectively, the fact is that there are no objective standards which are required to evaluate the character of KHMMs. So their prices by year and month fluctuate largely, and the amplitude of fluctuation is large. Moreover the producers of KHMMs have suffered a severe loss by the lack of price stability which comes from the unfair marketing of foreign herbal medicine materials. Recently the smuggling of herbal medicine materials from China, etc. is practiced in large volume and freguency.

On these issues, this study analyzes the actual marketing states of KHMMs, arranges their points at issue, and then in conclusion explores and suggests the alternative plans to improve their marketing system. The analyses on the actual marketing states have been proceeded by classifying the marketing structure and functions of KHMMs into the order of 'marketing channel and participants', 'actual marketing states in markets', 'transaction volume and marketing margin', 'actual states of contract cultivation and direct transaction', 'standardization' and 'KHMMs processing', etc. And the data from existing literatures and field survey which was carried out in February~March, 1998 have been synthetically utilized.

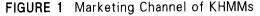
# II. Analyses on the Marketing Structure

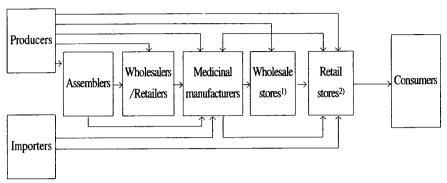
## 1. Marketing Channel and Participants

The marketing channel of KHMMs is composed of the marketing channel as agricultural products and that as medicines(Figure 1). The marketing channel as agricultural products is the channel of "producers  $\rightarrow$  assemblers  $\rightarrow$  wholesalers/retailers  $\rightarrow$  medicinal manufacturers," and the marketing channel as medicines is that of "medicinal manufacturers  $\rightarrow$  wholesale stores  $\rightarrow$  retail stores  $\rightarrow$  consumers." The KHMMs in producing areas are transacted by assemblers from producers to wholesalers/retailers who are the middle-marketing dealers in producing areas. Generally those wholesalers/retailers are called "... company." In this stage, producers, assemblers and middle-marketing dealers, etc. are at work. Their main functions are cultivation, collecting, assembling and brokerage, etc. of KHMMs, and these functions are classified into the behavior of agricultural products dealing.

The KHMMs which are sold from wholesalers/retailers(or some producers and assemblers) to medicinal manufacturers are made into standard materials or manufactured into herbal medicines. The standard materials which have passed through medicinal manufacturers are transacted as medicines, and then sold to the medicinal wholesalers who correspond to wholesale stores. And these medicinal wholesalers sell those materials to the herbal medicine materials dealers, herbal medicine stores, herbal medicine hospitals, drugstores and the other processing stores, etc. who are retail stores, and then finally those medicines are sold to consumers. On the other hand, some standard materials are directly transacted from producers to wholesale stores or retail stores, etc. The marketing channel of "producers -- retail stores" in standard materials and that of "producers → medicinal manufacturers → retail stores" in nonstandard materials correspond to the direct transaction where agricultural cooperatives are mainly at work.

The medicinal manufacturers who have been authorized to do that the manufacturing by Section 26 of the Drugs, Cosmetics and Medical Instruments Law (authorization to do manufacturing, etc.) are at work in manufacturing the herbal medicine materials which are





- |← Marketing channel as agricultural products → ← Marketing channel as medicines →
- 1) Wholesale stores: Medicinal wholesalers.
- 2) Retail stores: Herbal medicine materials dealers, Herbal medicine stores, Herbal medicine hospitals, Drugstores and other processing stores, etc.

TABLE 1 Main Marketing Firms Related to KHMMs, 1997

Unit: place

Medicine manufactures		Wholesale Stores	Retail Stores			
	i	Medicinal wholesalers	Herbal medicine, Materials dealers, Herbal medicine stores		Drugstores	Other processing stores
131	211	820	2,162	6,100	10,751	170

Source: Ministry of Agriculture and Forestry, Ministry of Health and Welfare.

normal and standard. There are 131 places of medicinal manufacturers (Table 1). And the imported KHMMs which importers have asked, after they pass through the medicinal manufacturers, mainly go through the channel of standard materials. There are 211 places of importers. The wholesale stores are authorized to wholesale, mixed-sell and prepare KHMMs or herbal medicines by Section 35 of the Drugs, Cosmetics and Medical Instruments Law (authorization to do medicines sale). There are 820 places of herbal medicine wholesalers.

Among the retail stores, there are 2,162 places of herbal medicine materials dealers/herbal medicine stores, 6,100 places of herbal medicine hospitals, 10,751 places of drugstores in which herbal medicines are dealt with, and 170 places of other processing

stores. The main functions of herbal medicine hospitals are prescription and preparation in which KHMMs are made use of. The other processing stores generically named flour mills, pill mills, decoction mills and health foods processing stores, etc. And of the main marketing firms related to KHMMs which are medicinal manufacturer, importers, wholesale stores and retail stores, etc. examined until now, there are 36,687 participants of those firms (Table 2).

Synthesizing the results of fields survey on participants in the marketing of KHMMs, we can see that the main sales of producers in the above mentioned marketing channel are subjected to assemblers, retail stores and wholesalers/retailers, etc. (Table 3). In the sales patterns of producers, farm gate sale is 41.7 percent which is the highest in their patterns. And simple processing sale, on farm sale, after storage sale, etc. are next in magnitude (Table 4). The sum of the proportion of on farm sale and farm gate sale is 57 percent or more. On the other hand, it was surveyed and found out that the buying objects of wholesale stores and retail stores had been producers and assemblers mostly. The proportion of buying amounts from producers and assemblers is 43.6, 41.5 percent respectively, and the sum of the proportion of these two buying objects is 85 percent or more (Table 5).

TABLE 2 Marketing Participants of KHMMs, 1997

Unit: person

Producers Assemblers, Wholesalers Retailers		Persons engaged in marketing firms
52,567	23,000	36,687

Source: Ministry of Agriculture and Forestry, Ministry of Health and Welfare, Field Survey.

TABLE 3 Sales Objects of Producers Related to KHMMs\*

The Proportion of Producers' Sale by Objects (%)						
Assemblers	Wholesalers, Retailers	Manufacturers	Wholesale stores	Retail stores	Others	Total
39.9	18.5	4.5	4.1	34.5	1.5	100.0

Survey Time: Feb.~Mar. 1998.

Samples: 15.

Source: Field Survey.

TABLE 4 Sale Patterns of Producers Related to KHMMs\*

	The Proportion of Producers' Sale by Sale Patterns (%)							
On farm sale	Farm gate sale	After storage sale	Simple processing sale	Shipping sale	Others	Total		
15.5	41.7	14.5	17.4	10.2	0.7	100.0		

Survey Time: Feb.~Mar. 1998.

Samples: 15.

Source: Field Survey.

TABLE 5 Buying Objects of Wholesale Stores and Retail Stores\*

The Proportion of Buying Amounts by Objects (%)							
Producers Groups		Assemblers	Wholesalers Retailers	Others	Total		
43.6	3.1	41.5	7.4	4.4	100.0		

Survey Time: Feb.~Mar. 1998.

Samples: 15.

\* Wholesale stores and Retail stores: Medicinal wholesaler, Herbal medicine materials dealers, Herbal medicine stores, Herbal medicine hospitals, Drugstore and other Processing stores, etc.

Source: Field Survey.

#### 2. Actual Marketing States in Markets

The markets of KHMMs in consumption areas, centering around Kyeongdong Market in Seoul and Daigu Medicinal Stuffs Market, are distributed over Pusan and Kwangju, etc. where the volume of those markets begin to grow larger and larger recently. And those markets in producing areas are distributed over Jecheon, Youngcheon and Gumsan, etc. The transaction volume of Kyeongdong Market in Seoul has been surveyed to be the level of 40~70 percent for that of total marketing quantity. And that of Daigu, Jecheon and Pusan, etc. has been found out to be the next in magnitude (Table 6).

TABLE 6 Transaction Volume of Main Markets for the Total Marketing Quantity

Unit: %

Kyeongdong Market	Daigu	Jecheon	Pusan, Youngcheon, Gumsan, Kwangju, etc.
40~70	10~20	10~20	10~25

Source: Synthesis of the Existing Studies and Field Survey.

#### 2.1. The Markets in Producing Areas

The market in producing areas is the stage of products assembling which has been dispersed in petty and numerous producers and areas. The assemblers engaged in this stage have been relatively specialized in areas and items. With a long experience, information and technology, etc. they link the producing areas to the wholesalers and the retailers who are the middle marketing dealers in consumption areas. As markets which have been prepared in producing areas, the markets in Jecheon, Youngcheon, Gumsan, Jeonju, Jeongju and Jeongsun, etc. are presently active. There is an assembling market specializing in the assembling of KHMMs in Jecheon.

In some of chief producing areas, after primary cooperatives, farming cooperatives corporation and producers groups by agricultural items, etc. assembled, classified and standardized KHMMs, and they often transact those materials with medicinal manufacturers and herb doctors through a contract with producers, or some of them perform assembling functions only. Primary cooperatives, farming cooperatives corporation and producers groups by agricultural items, etc. through the assembling and conciliating herbal medicines, or through the simple processing with a jute bag package, etc. raise the character of goods which have been produced by the members of cooperatives, and then transact with wholesale stores in wholesale stage or retail stores in retail stage, etc.

#### 2.2. The Markets in Consumption Areas

The markets in consumption areas, as the stage of wholesale and retail, cannot be separated clearly. In the wholesale stage, the wholesalers who are middle-marketing dealers and are generally called "... company," and the medicinal wholesalers who are wholesale stores, are at work in marketing. But in the retail stage, with a purpose for resale, the retail stores who are herbal medicine materials dealers, herbal medicine stores, herbal medicine hospitals and drugstore, etc. are at work in the marketing activities intended for consumers.

In these stages, there is only one institutional market in Daigu, namely Daigu Wholesale Market for KHMMs. Therefore most of the markets in consumption areas are customary and qusi-ones where the consigned transaction is widely prevalent. In institutional wholesale market such as Daigu, after those materials which have been assembled by assemblers or wholesalers and retailers who are middle-

marketing dealers pass through medicinal manufacturers, etc. they are collected and transacted through auctioning, and then dispersed by way of jobbers.

As a representative of the markets in consumption areas, Kyeongdong Market in Seoul is a large, customary and qusi-one which specializes in KHMMs, where more than 1,000 places of livein firms such as herbal medicine materials dealers, herbal medicine stores, herbal medicine hospitals, drugstores and the other processing stores, etc. are in close order (Table 7). The Existing Studies and Field Survey shows that the transaction volume of Kyeongdong Market is 40~70 percent of the total marketing quantity (Table 6). Though the KHMMs in this market are relatively cheap because most of them are transacted directly from the chief producing areas, there are also many cases of unfair transaction or imports which are assumed as Korean products. Moreover, the reality is that order in the market has been shaken, owing to the business stagnation under the IMF system, as well as to the institutional reform such as the enforcement of standard materials on marketing system and the dispute between herbal medicine and medicine.

Daigu Wholesale Market for KHMMs which is the unique legal one in the markets for KHMMs transacts those materials through auctioning every five days. This market takes charge of the role of standardization for the market price of national herbal medicines, through the wholesale activity on those materials both home and foreign-grown (Figure 2). The transaction quantity and amounts of the market are about 800 tons, 5 billion won level, respectively. There are 48 person of jobbers in the market (Table 8). And bellflower, peony, alisma canaliculatum and angelica uchiyamana, etc. are the main transaction items of that market.

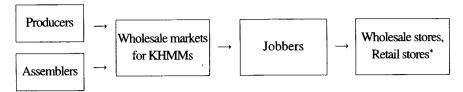
 TABLE 7
 The Volume of Kyeongdong Market in Seoul, 1998

Unit: place

	Main Live-in Firms	Medicinal Materials
Wholesale Stores	Retail Stores	Dealt in Market
Medicinal wholesalers : 57	Herbal medicine materials dealers, Herbal medicine stores : 23 Herbal medicine hospitals : 326	Young antlers, Herbal medicines, the Medicines of mineral materials: more than
Importers : 99	Drugstores : 312 Other processing stores : 82	400 materials

Source: Field Survey.

FIGURE 2 Transaction System of Daigu Wholesale Market for KHMMs



\* Wholesale stores/Retail stores: Medicinal wholesaler, Herbal medicine materials sealers, Herbal medicine stores, Herbal medicine hospitals, Drugstore, and Other processing stores, etc.

Source: Daigu Wholesale Market for KHMMs.

TABLE 8 The Volume of Daigu Wholesale Market for KHMMs

Market Scale (pyung)	Transaction quantity in 1996	Transaction amount in 1996	Jobbers (person)	Main transaction items
Site: 840 Total floor Space: 1,043	about 800 tons	about 5 billion won	48	Bellflower, Peony, Alisma canaliculatum, Angelica uchiyamana and Dogwhal, etc.

Source: Daigu Wholesale Market for KHMMs.

#### 3. Transaction Volume and Marketing Margin

The yearly marketing volume of herbal medicine materials is estimated to be about 509.4 billion won in case of 1996, which is composed of 396.2 billion won of home production and 113.2 billion won of imports. The amount of home production is divided into 390.2 billion won at cultivated materials and 6.0 billion won at natural grown ones (Table 9). And the yearly transaction quantity of those materials is estimated to be about 82,580 tons, in case of 1996, which is composed of 45,368 tons of home production, 38,185 tons of imports and 973 tons of exports, respectively.

As stated above for KHMMs, their market functions are weak and their marketing channel has the structure of many stages. So corner and hoard is prevalent and high marketing margin is generated in that structure. From producers in producing areas to consumers in large cities, because a great many middlemen are scattered at the markets in producing areas and consumption areas, etc. marketing margin becomes high.

TABLE 9 Marketing Volume of Herbal Medicine Materials, 1996

	Amounts (b	illion won )		
Home production				
Cultivated	Natural grown 6.0	Imports	Tota	
390.2 6.0		113.2	509.4	
, , ,	Quantity	(ton)	<u> </u>	
Home production	Imports	Exports	Total	
45,368	38,185	973	82,580	

Source: Ministry of Agriculture and Forestry.

In order to analyze marketing margin, this study has carried out a field survey during February~March, 1998 through a form of interview. The surveyed marketing channel is the course of "producers — assemblers/wholesalers/retailers — medicinal manufacturers — wholesale stores — retail stores." And the surveyed items are hedysarum and angelica uchiyamana (Table 10). As the survey areas for producing ones, Jeongsun/Bongwha/Jecheon, and for consumption ones, Seoul/Daigu have been taken respectively. Jeongsun, Bongwha and Jecheon, etc. are the chief producing areas of hedysarum and angelica uchiyamana. And the selected grades are large hedysarum for hedysarum, body angelica uchiyamana, for angelica uchiyamana respectively. These grades are popular ones of which marketing quantities are the most plentiful of all.

According to the result of the field survey, it is found out that the average marketing margins of large hedysarum and body angelica uchiyamana in the marketing flow from producers to consumers are 17,440, 4,220 won per a keun of 600 gram, respectively. Their marketing margin rates are 52.0, 48.3 percent, respectively (Table 11). Marketing margin is composed of marketing cost which is incurred from performing marketing functions and commercial profits of marketing participants. There are loading and unloading costs, transportation cost, sorting/packaging/stuff costs, decrease and waste,

TABLE 10 Design of Marketing Margin Survey

		Surve	ey Areas			
Items		areas	Consumption areas	Grades	Samples	
Hedysarum	Producers—Assemblers, Wholesalers, Retailers—Medicinal manufacturer —Wholesale stores—Retail stores	Jeongsun, Jecheon	Seoul, Daigu	Large hedysarum*	15	
Angelica uchiyamana	"	Bongwha, Jeongsun	"	Body angelica uchiyamana	15	

Survey Time: Feb.~Mar. 1998. Survey Form: Interview.

TABLE 11 Marketing Margin in the Usual Transaction

Unit: won/600g, %

Items	Producers' receiving price	Consumers' paying price	Marketing margin	Marketing margin rates*	
Hedysarum	16,120	33,560	17,440	52.0	
Angelica uchiyamana	4,510	8,730	4,220	48.3	

<sup>\*</sup> Marketing margin rate = (Marketing margin/Consumers' paying price)  $\times$  100. Source: Field Survey.

inspection fee, storage cost and tax, etc. in marketing cost. The survey shows that the middlemen at the assembling stages in producing areas aim at the commercial profits of about 5 percent for their total sale amounts due to their pettiness, but the wholesale stores or the retail stores in consumption area markets take the profits of 20~30 percent for their total sale amounts. In some cases, the wholesale stores or the retail stores take the profits of many times as much as the buying price.

In order to compare the marketing margin that is generated in the usual marketing channel which we have examined above with the marketing margin that is generated in direct transaction, this study has surveyed the cases of direct transactions between producers groups

<sup>\*</sup> Of which roots are from three to five years old.

<sup>&</sup>lt;sup>1</sup> The level of marketing margin rates for agricultural products are 54.3~79.7 per cent for radishes, cabbage, garlic, onion, and 36.1~39.2 percent for apple and pear in 1997 (Lee et al. 1977, 61).

and retail stores (or association). These cases are the direct transactions by which the farming cooperatives in Jeongsun and Jecheon have sold hedysarum or angelica uchiyamana to herb doctors association, herbal medicine materials dealers or herb doctors, etc. The marketing margin rates in these cases are 19.2~35.3 percent (Table 12). There are great differences between these rates and those which are generated in the usual marketing channel, though there has been discordance in survey time.

# 4. Actual States of Contract Cultivation and Direct Transaction

In the KHMMs marketing, not only their market transaction is very customary, but also the arbitrariness of the middlemen who are assemblers, wholesalers and retailers, etc. is very excessive, and fair transaction has not yet been established. In order to improve this state, therefore, direct transaction has come up as an alternative plan. And contract cultivation is becoming a means for the direct transaction.

Farming cooperatives corporation, producers groups by agricultural items, agricultural cooperatives who are producers groups, etc. are mainly at work in the fields of direct transaction. They transact

TABLE 12 Marketing Margin in the Direct Transaction

Unit: won/600g, %

Items	Marketing channel	Transaction time	Grades	receiving	Consumers' paying price	Marketing margin	Marketing margin rates <sup>1)</sup>
Hedy- sarum	Farming Cooperative of Herbal Medicine in Jeongsun → Herb Doctors Association	May. 1996 <sup>2)</sup>	Large Hedy- sarum	15,410	19,073	3,663	19.2
Hedy- sarum	Farming Cooperative in Mt. Weulak  → Herbal Medicine Materials Dealers(in Kyeongdong Market)		Medium <sup>3)</sup>	3,750	4,750	1,000	21.1
Angelica uchiya- mana	Farming Cooperative of Herbal Materials in Mt. Moonsu → Herbal Medicine Hospitals (in Sungnam City)	Nov. 1997	Medium <sup>3)</sup>	2,750	4,250	1,500	35.3

1) Marketing margin rates = (Marketing margin/Consumers' paying price) × 100.

3) Of which roots are one year old.

Source: Field Survey.

<sup>2)</sup> Because of the heavy decline in the price of KHMMs and a sudden increase in the imports of Chinese herbal medicines of which prices were very low, the direct transaction had been ceased since this time.

KHMMs directly with various associations who are the retail stores' groups. The systematization of KHMMs producers is led by medicine manufacture corporations and herbal medicines association, etc. in the stages of contract cultivation or by National Agricultural Cooperative Federation who have organized National Council of KHMMs.

In 1996 as opposed to 1995, the direct transaction quantity itself and the number of agricultural cooperatives who took part in such transaction had increased, but the transaction amounts had decreased owing to the heavy decline in the price of KHMMs. Direct transaction has actually been in the state of interruption since 1996. Another important factor for the inactivity of direct transaction is that the stored quantity which had been purchased through direct transaction is cumulating in the demand groups for direct transaction, because the members of those groups who are retailers prefer the imports of which prices are very low to the domestic materials of which prices are high.

More than half of the hedysarum products in Korea are being shipped from Jeongsun county which had been solely designated as a hedysarum complex among the chief producing areas. The farming cooperatives corporation of herbal medicines in that county had established the synthetic marketing center for herbal medicines and had been equipped with the cooperative marketing areas, the place for display and sale, the processing market, etc. The corporation continued to supply the herb doctors association with hedysarum through direct transaction. It was surveyed that the corporation had directly transacted 6,213kg of that item valued at, 197.5 million won in 1996. But this direct transaction is in the state of interruption since that year due to the heavy price decline (Table 13).

The Farming Cooperative in Mt. Weulak and the Farming Cooperative of Herbal Materials in Mt. Moonsu which are situated in Jecheon have been equipped with the facilities for KHMMs processing and collection. And they transact directly KHMMs with the dealers of herbal medicine materials in Kyeongdong Market and the herb doctors in Sungnam city, etc. They continue to transact directly those items, while the direct transactions in other areas are actually in the state of interruption after the heavy decline in the price of KHMMs. The key to this consequence consists in the fact that they have constructed confidence in each other through the efforts on quality management.

TABLE 13 Direct Transaction Cases by Producers' Groups(Farming Cooperatives) in Producing Areas

Unit: kg, million won

Producers groups	Transaction partners	Transaction time	Items	Grades	Quantity	Amounts
Farming Cooperative of Herbal medicine in Jeongsun	Herb Doctors Association	May, 1996 <sup>1)</sup>	Hedysarum	Large Hedy- sarum	6,213	197.5
Farming Cooperative in Mt. Weulak	Herbal Medicine Materials Dealers and Kumdong Department Store in Kyeongdong Market	Nov, 1997	Hedysarum, Angelica uchiyamana	Medium <sup>2)</sup>	6,000	45.0
Farming Cooperative of Herbal materials Mt. Moonsu	Herbal Medicine Hospitals in Sungnam City	Nov, 1997	"	Medium <sup>2)</sup>	3,000	22.5

<sup>1)</sup> Because of the heavy decline in the price of KHMMs and a sudden increase in the imports of Chinese herbal medicines of which prices were very low, the direct transaction had been ceased since this time.

2) Of which roots are one year old.

Source: Field Survey.

## III. Analyses on the Facilitating Functions of Marketing

#### 1. Standardization

Standardization system is one of the devices which secure the transparency in KHMMs marketing. "The Provisions for The Quality and Marketing Management of KHMMs" had been enacted in 1995, and KHMMs marketing converted their system into the standard materials marketing through medicinal manufacturers, by the measures which had entirely forbidden the nonstandard materials marketing for the 36 items of KHMMs since 1996. The number of items which is the object of standardization has been expanded into 514 items in 1998.

The normal standard materials of KHMMs signify the KHMMs that are conformable to the provisions of normal standards. These provisions are prescribed in Paragraph 10, Subsection 1, Section 57 of

the enforcement rule of "the Drugs, Cosmetics and Medical Instruments Law." According to the field survey which made observation for the bases of quality standard evaluation in the actual marketing, it is found out that drying states, color and size, etc. in turn are regarded as most important of the bases by medicinal wholesalers, herbal medicine stores and herbal medicine hospitals, etc. who are wholesale stores and retail stores of herbal medicine materials (Table 14). Besides these, each of the producing areas, thickness and sorting states, etc. are important.

The standardization of KHMMs is inactive, because there are many difficulties in their standardization. Those difficulties are derived from the characteristics of the goods that their volume of production, consumption and marketing are petty, and that their medicinal effects are regarded as important. The standard materials marketing system through medicinal manufacturers is faced with many problems caused by the old and customary transaction, and by the overinvestment of the standard medicinal manufacturers for KHMMs in 131 places, because not only are they improperly equipped with the market organizations for the demand and supply, price making of KHMMs, but also the industry of herbal medicines itself takes part in this new system passively.

According to a survey in 1997, it is found out that the ratio of standard materials marketing in case of wholesale stores is the level of 13~22 percent, and the quantity of nonstandard materials reaches the level of 3~7 times as many as that of standard ones (Table 15). The ratio of the medicinal manufacturers of standard materials of

TABLE 14 Bases of Quality Standard Evaluation by Wholesale Stores and Retail Stores\*

	Bases of Quality Standard Evaluation							
Drying states	Color	Size	Producing areas	Thickness	Sorting states	Crumbs	Kinds	Total
29.6	21.1	19.5	9.5	7.4	5.9	3.7	3.3	100.0

\* Survey Time: Feb.~Mar. 1998. Samples: 15.

\* Wholesale stores and Retail stores: Medicinal wholesaler, Herbal medicine materials dealers, Herbal medicine stores, Herbal medicine hospitals, Drugstore,

and Other processing stores, etc.

Source: Field Survey.

TABLE 15 Ratio of Standard Materials Marketing in case of Wholesale Stores\*

Items	Samples	Quantity of standard materials*	Quantity of nonstandard materials**	Ratio of standard materials marketing (%)
Licorice	68	100	363.1	21.6
Cinnamon	66	100	415.6	19.4
Mint	60	100	346.7	22.4
Pachyma hoelen	67	100	671.2	13.0
Gwakhyang	63	100	428.7	18.9

<sup>\*</sup> Survey Time: Apr.~Jun. 1997.

Source: The Safety Head Office of Foods Medicines.

TABLE 16 Operating Rate of Medicinal Manufacturers, Apr. 1997

Operating Rate	~ 25%	25~50%	50~75%	75% ~	Average	Total
Number of manufacturers	35	19	8	2		64
Distribution (%)	54.7	29.7	12.5	3.1	15.0	100.0

\* Samples: 64.

Source: The Safety Head Office of Foods Medicines.

which operating rate is below 50 percent reaches 84.4 percent of the total, and also the ratio of which operating rate is below 25 percent is 54.7 percent. It is found out, therefore, that the average operating rate is the level of 15 percent (Table 16).

#### 2. KHMMs Processing

### 2.1. KHMMs Processing in Producing Areas

The KHMMs processing in producing areas is a shortcut to not only the income increase but also the structural improvement of those producers. The industrial level drying or KHMMs processing in

<sup>\*\*</sup> The quantity of standard materials has been put into 100, and that of nonstandard materials is the conversion indices when the quantity of standard materials is put into 100.

producing areas is performed mainly by the primary agricultural cooperatives who are producers' groups in those areas, and partly by farming cooperatives corporations, etc. This is mainly by virtue of the undertakings that rear and support the simple processing by agricultural cooperatives who are producers' groups, and the processing drying at the level of one time processing, or the construction of processing factories. The government enforces these undertakings in a supporting form for processing industries through the management of model undertakings for KHMMs processing of high quality in order to increase producers' income.

But the participation of KHMMs producers, farming cooperatives corporations or producers groups, etc. in the processing industries at the level of producing areas takes place only in the beginning stages. The processing industries in producing areas are made up of the market structure of oligopoly which puts first a few large enterprises who are mostly the large scale companies of medicinal manufacture. Therefore the processing firms in which producers and producers' groups participate are only a few and also the scale of their participation is petty. In order to overcome and cope with these poor conditions in the processing industries at the level of producing areas, the processing factories of KHMMs in producing areas have to be systematized, and the linking systems for synthetic processing which support those industries also have to be developed.

The number of the model undertakings areas for which the government rears and supports the participation of producers and producers' groups in processing industries was 35 in 1997. Examining those places by areas, they are concentrated into the chief producing areas of KHMMs, that is, Kangwon province (Tebek, Jeongsun, Youngweol, Samcheok and Inje, etc.), North kyongsang province(Youngpung, Andong, Yecheon), South chungchong province(Gumsan, Te-an) and North cholla province(Jinan, Jangsu, Muju, Imsil), etc. And examining the present situation of the processing factories for KHMMs which are being managed by farming cooperatives corporations or regional agricultural cooperatives, etc. Tebek agricultural cooperative in Kwangwon province is selling in markets the processing drinks such as Plateau D, Ever-blue D and Samsol D, etc. that are made of the raw materials such as angelica uchiyamana, angelica polymorpha and hedysarum,

etc. which are the special products of this region. Ongdong agricultural cooperative of Jeongju in North cholla province is selling all Sukjiwhang through processing in the forms of contract cultivation, and has enhanced the reputation of KHMMs through management of quality (Table 17).

**TABLE 17** Processing Factories for KHMMs managed by Producers' Groups in Producing Areas, 1997

Province (Total 35 Places)	Producers' groups	Contents of KHMMs processing
Kyonggi pro. (3 Places)	Yangpyeong Agr.Coop., Jeonkog Agr.Coop., Sudong Agr. Coop.(in Namyangju)	Japanese touchwood mushroom powders or Trotters, Roast grain powders
Kangwon pro.	Tebek Agr.Coop., Hadong Agr.Coop.(in Youngweol), Inje Agr.Coop., Hajang Agr.Coop.(in Samcheok), Seogwang Agr.Coop.(in Yangyang), Jeongsun Agr.Coop.	Wild plants, medicinal herb drinks, Arrowroots noodles, Chikeori, Medicinal herbs, Injin mugworts taffy
North Chungchong pro. (2 ")	Gumseong Agr.Coop.(in Jechon), Bown Agr.Coop.	Medicinal herbs, Jujubes drinks
South Chungchong pro (5 ")	Gumsan Agr.Coop., Ungok Agr.Coop.(in Cheongyang), Tean Agr.Coop., Bibong Agr.Coop.(in Cheongyang), Buseok Agr.Coop.(in Seosan)	Taegeuk ginseng, chinese matrimony vine tea, Chinese matrimony vine juice, Gingers, Garlics
North Cholla pro. (6 ")	Ongdong Agr.Coop.(in Jeongju), Kangdeok Agr. Coop.(in Imsil), Yongdam Agr.Coop.(in Jinan), Anseong Agr.Coop.(in Muju), Jangsu Agr.Coop., Bongdong Agr.Coop.(in Wanju)	Sukjiwhang, Medicinal herbs, Ginseng drinks, Medicinal herbs, Extract of black goats, Ginger powders
South Cholla pro. (4 ")	North Agr.Coop.(in Boseong), Sangdong Agr. Coop. (in Gurye), Dongjin Agr. Coop.(in Jindo), Youngam Agr.Coop.	Peony drying, Macrocarpium officinal tea, Chinese matrimony vine drinks, Cassia tora tea
North Kyongsang pro. (5 ")	Bomun Agr.Coop.(in Yecheon), Munsu Agr.Coop. (in Youngpung), Pyeongwn Agr.Coop. (in Youngpung), Bukhu Agr.Coop.(in Andong), Nokjeon Agr.Coop.(in Andong)	Bellflower neckta, Bellflower, chinese tam hasuo, Chinese yam drinks, Chinese tam powders
South Kyongsang pro. (4 ")	Haseong Agr.Coop.(in Geochang), Hadong Agr.Coop., Sandong Agr.Coop.(in Milyang), Macheon Agr.Coop.(in Hamyang)	Medicinal herbs goney, Plum juice, Jujubes juice, Medicinal mountain herbs

Source: National Agricultural Cooperative Federation.

# 2.2. KHMMs Processing in Medicine Manufacturing, Foods Corporations, Liquors Industries and Retail Stores, etc.

Recently there is a growing interest in the foods development of which raw materials are KHMMs. With medicinal manufacturing companies and foods corporations as the central figure, the R&D investments into this field are, therefore, performed in a large scale and the production scale also grows in size more and more. About 300 medicinal manufacturing companies are presently taking part in the new medicine development through the KHMMs processing. For example, the chief companies such as Gwangdong Pharmacy Co. and Samsung Pharmacy Co., etc. are producing industrially herbal medicines such as Gwangssang Decoction F and Wuwhangcheongsimweon, etc. which are widely known. The raw materials of these medicines are mainly peony, singok and angelica uchiyamana, etc. (Table 18).

Mainly, there are drinks and traditional granule teas as processing foods of KHMMs. Several foods companies such as Samwha Foods Co. and Ilyang Medicines Co., etc. produce Chinese matrimony vine tea, jujubes tea, youngbicheon and gingers tea, etc. from the raw materials such as jujubes, Japanese touchwood mushroom and gingers, etc. (Table 19). Various types of the foods flavored with KHMMs are being developed under the influence of the rise in income level, the growing concern for health and the tendency to pursue convenience foods, etc.

The manufacture of medicinal liquors or processed liquors, as liquors industries, of which raw materials are KHMMs is one of the main fields in KHMMs processing. Korean people for a long time have been making habitual use of medicinal liquors, folk liquors and

TABLE 18 Herbal Medicine Production through KHMMs Processing

Herbal Medicine Products	Raw Materials from KHMMs	Production Co.
Gwangssang Decoction F. Wuwhangcheongsimweon, Gyeongokgo, Giwngwhan, Jeongsim Tablet, Pyeonjawhan	Arrowroots, Licorice, Peony, Dried orange peel, Ginseng, Musk, Gmbak, Fresh rehmannia glutinosa, Pachyma hoelen, Gumseol, Angelica uchiyamana, Ophiopogon japonicus, Sanjoin, Gynnula japonica	Gwangdong Pharmacy Co.
Kholkikcapsule, Tanagan, Wuwhangcheongsimweon	Licorice, Ginseng, Ginkgo leaves, Chinese yam, Ophiopogon japonicus, Musk	Daewung Pharmacy Co.
Sunyongbo, Sunnokbo	Duchung, Maximowiczia chinensis, Ginseng, Wmyangkwag	Dongsin Pharmacy Co.
Nokwhangbo, Ssikyuran	Chinese matrimony Vine, Hawthorn haws, Garlics, Ginkgo leaves, Elisa	Donga Pharmacy Co.
Daegam Decoction, Whalmyeongsu, Wuwhangcheongsimweon, Ssangwha Decoction, Wiqul Liquid, Whalweon Liquid	Angelica uchiyamana, Licorice, Bellflower, Peony, Sukjiwhang, Hedysarum, Angelica polymorpha, Pachyma hoelen, Ophiopogon japonicus, White ginseng, Miler divaricatum, Cinnamon, Jujubes	Dongwha Medicines Co.
Yongkaksan, Lamoru	Licorice, Bellflower, Borneo camphor, Senega, Apricot stone	Boryeong Pharmacy Co.
Araksil, Agio	Chajeonja, Chajeonja rind, Senna fruits	Bugwang Medicines Co.
Gasmyeongsu, Gascheongsu, Wuwhangcheongsimweon	Cinnamon, Catechu, Sogudu, Red peppers, Dried orange peel, Dried gingers, Borneo camphor, Chinese yam, Licorice, Peony, Ophiopogon japonicus, White ginseng, Singok., Angelica, Bellflower, Angelica polymorpha, Tractylis ovata	Samsung Pharmacy Co.
Panus Tablet, Raktina, Serbi Liquid	Ginkgo leaves, Dried orange peel, Whangbaek gunpowder, Cinnamon, Dried gingers, Fennel, Maximowiczia chinensis, Hedge parsley seeds, Wmyangkwag	Samjin Pharmacy Co.
Jinbahn	Chinese matrimony vine, White ginseng, Wmyangkwag, Angelica uchiyamana, Dried gingers	Youngjin Medicines Co.
Wuwhangcheongsimweon Liquid, Ssamgam Decoction	Licorice, Chinese yam, Nut grass, Beefsteak plant leaves, Tractylis ovata roots, Angelica polymorpha, Dried orange peel, Jujubes, Angelica davurica roots, Angelica uchiyamana, Bellflower, Pachyma hoelen, Musk, Ginseng	Chosun Medicines Co.
Flabon Tablet, Pinagel	Ginkgo leaves, Licorice, Cinnamon, Fennel	Korong Pharmacy Co.
	Ginseng	Handok
Yeokbał Liquid	- Simoning	Medicines Co. Hanil

Source: Synthesis of Existing Literatures.

TABLE 19 Production of Processed Foods through KHMMs Processing

Processed Foods	Raw Materials from KHMMs	Production Co.
Chinese Matrimony	Chinese matrimony vine,	Gugje Foods Co. Unmuweon Foods Co.
Vine Tea	Maximowiczia chinensis, Jujubes	Hanlim Foods Co.
Jujubes Tea	Jujubes, Gingers, Cinnamon, etc.	Gugje Foods Co. Samwha Foods Co. Miweon Drinks Co. Hankug Foods Co. Hanlim Foods Co.
Youngbicheon	Japanese touchwood mushroom	Ilyang Medicines Co. Miweon Drinks Co. Gasan Japanese Touchwood Mushroom Foods Co.
Gingers Tea	Gingers, Cinnamon	Goryeo Ginseng Co. Gugje Foods Co. Hankug Foods Co. Dongseo Foods Co. Samwha Foods Co. Pulmuwon Foods Co. Hanlim Foods Co.
Cinnamon Tea	Cinnamon, Gingers, Licorice	Gugje Foods Co. Samwha Foods Co. Hankug Foods Co.
Maximowiczia Chinensis Tea	Maximowiczia chinensis	Gugje Foods Co. Unmuweon Foods Co. Hankug Foods Co.
Dangguiyoung Tea	Angelica uchiyamana, Jujubes, Japanese touchwood mushroom	Unmuweon Foods Co.
Unjicheon	Unji	Gwangdong Pharmacy Co.
Chinese Yam Tea	Chinese yam, Potato	Gohyang Foods Co. Dahyang Foods Co. Hankug Foods Co.
Macrocarpium Officinal Tea	Macrocarpium officinal	Jisan Foods Co.
Arrowroots Tea	Arrowroots, Gingers	Goryeo Ginseng Co. Sacheon Co. Samwha Foods Co. Hankug Foods Co. Hanlim Foods Co. Hanil Foods Co.
Duchung	Duchung	Hanlim Foods Co.
Ssangwha Tea	Herb tonic	Goryeo Ginseng Co. Dongseo Foods Co. Gugje Foods Co. Samwha Foods Co. Hanlim Foods Co.
Roast Grain Powder Tea	Roast grain powder, Bean, Peanut, Glutinous rice, etc.	Gugje Foods Co. Pulmuwon Foods Co. Hankug Foods Co. Hanlim Foods Co.
Ginseng Tea	Ginseng	Dongseo Foods Co. Ilwha Co.

Source: Synthesis of Existing Literatures.

fruit liquors, etc. that are made of wild herbal medicine materials. Ginseng liquor is typical of them, and Chinese matrimony vine liquor, angelica uchiyamana liquor, macrocarpium officinal liquor, acanthopanax sieboldianus' root bark liquor, maximowiczia chinensis liquor, chrysanthemum liquor, codonopsis lanceolata liquor, gingers liquor, bellflower liquor, Chinese quince liquor and plum liquor, etc.

are also well known.

On the other hand, the consumption of herbal medicines and their packs which are prepared through KHMMs processing grows larger at retail stores such as herbal medicine hospitals, drugstores, herbal medicine stores and other processing stores. Moreover, there will be a sudden increase in the demand for such consumption at these stores, if the enforcement of medical insurance is expanded in future. There is a growing tendency that the processed packs of KHMMs which are convenient to drink are manufactured at the retail stores through the KHMMs processing into decoction.

## IV. Points at Issue in KHMMs Marketing

#### 1. Weakness and Premodernity in Market Functions

As assembling function still controls the process of KHMMs marketing, assembling markets function in producing areas and wholesale markets function in consumption areas are weak. The demand and supply are unstable and the pricing function is weak, because the market functions have not been activated. Therefore producers' bargaining power is weak and the markets for them are unstable. Accompanied the unstableness in demand and supply, the imported quantity has increased. So there are a large inflow and smuggling of herbal medicine materials from China of which prices are much lower than those of KHMMs.

As the assembling markets in producing areas are weak, assemblers control those marketing and corner and hoard is prevalent. Accordingly quasi-markets are dominant and those functions such as demand and supply control, pricing, assembling and dispersing, transaction settlement, etc. are weak. Because of unstable marketing and weak market functions, KHMMs marketing has the structural characteristics of being divided into many stages marketing from producers to consumers. And as KHMMs pass through the channel of many stages marketing, their producers' receiving prices are bound to fall and their consumers' paying prices are bound to rise. Accordingly, harm to producers and consumers is ensued.

In order to avoid this, contract cultivation and direct transaction

have been tried out. But there has been much difficulty in carrying them out, because the fundamental data which can determine the production cost are insufficient, it is difficult to determine the contract price owing to the severe fluctuation of market price, quality basis has yet not been established, and because the demand groups who are buyers prefer the imported herbal medicines to KHMMs of which are relatively high.

#### 2. Pettiness in Scale

The cultivation scale of KHMMs is fundamentally petty. Accordingly the assembling function is inevitable and the direct transaction is weak. Also the scale of marketing quantity is petty and the method of transaction is customary and nonstandardized. Producers cannot even conceive the idea of constructing the facilities for drying and storage on account of lack of fund which comes from the pettiness in their scale. Most KHMMs are assembled and intermediated by assemblers, so fair transaction is not induced and the competitive power of KHMMs is falling. Although some measures for producers' systematization in producing areas have been executed in order to produce competitive KHMMs, the systematization of KHMMs producers is yet at a low stage.

#### 3. Inactivity of Standardization

From the characteristics of goods, the standardization for KHMMs is inactive. The fact is that the estrangement of actuality from institution, the weakening in the governmental driving justice, the conflict of interests and the incapability of control, etc. are all intertwined. Standard materials are being disregarded even in the main markets for KHMMs. Marketing dealers, trade dealers and real consumers, etc. except the medicinal manufacturers for standard materials, actually refuse to accept the standard materials marketing on the ground of the wide estrangement of standardization institution from actuality.<sup>2</sup>

As the standard materials marketing system for KHMMs which had been enforced for the purpose of supplying good quality of

<sup>&</sup>lt;sup>2</sup> Medicinal Business Newspaper, June 23, 1997.

KHMMs for the consumers began to limp such as the KHMMs manufacture by the disqualified, the illegal marketing of nonstandard materials, the government has expanded the standardization items of which numbers are only 36 items at present into 514 items in and after 1998. But the adjustment of opinions concerning KHMMs between Ministry of Agriculture and Forestry and Ministry of Health and Welfare has not been completed yet. Not only imported herbal medicine materials but also KHMMs have not been standardized well. And these issues give rise to the disorder in KHMMs marketing. The inactivity of standardization becomes one of the factors which make the fair transaction difficult.

#### 4. Low Level of KHMMs Processing

In the fields of not only medicine manufacturing but also foods processing industries of which raw materials are KHMMs, the processing level is low. Especially the manufacturing level of herbal medicine from KHMMs is very low and simple. As the marketing of most KHMMs is actually led by quasi-middlemen, the producers who are not equipped with the facilities such as those of storage and KHMMs processing, etc. are only in the state of submitting to the disadvantage which is derived from their weak ability to cope with the price fluctuation because they can not control the shipping of KHMMs. Moreover, the unfair and illegal marketing in which the imported herbal medicine materials from China whose prices are very low, being cheated as Korean products is serious. Therefore, it is necessary to drive KHMMs processing in direction which aims at safety packaging and standardization.

## 5. Insufficiencies in the Market Management Policies

As the governmental measures and the longrun and shortrun policies to rear and support the KHMMs industries are insufficient, the producers or the related organizations can not easily adapt themselves to those measures or policies. The present supporting measures for KHMMs are restricted in support scale or items, and are insufficient in those measures such as quality improvement and goods' character enhancement. As the allotment of the role related to KHMMs among

the organizations was insufficient, the adjustment of such role among the development of governmental policies, the guiding organizations for researches, agricultural cooperatives and various groups, etc. has not been accomplished yet. And as the linkage among them is not sufficient enough, they are not in harmony with each other.

Moreover, as KHMMs are treated as agricultural products in the process of production, but treated as medicinal materials in the process of consumption transaction, Ministry of Agriculture and Forestry takes charge of the process of production, while Ministry of Health and Welfare does the process after the medicinal manufacturers. Such a management system from two stations for KHMMs has not only brought about the ambiguity of managemental station, but also disclosed considerable differences of views on policies between managemental organizations.

## V. Summary and Conclusion

According to the analyses until now, the marketing of KHMMs can be summarized into the weakness and premodernity in market functions, the smallness in scale, the inactivity of standardization, the low level of processing and insufficiencies in the market management policies, etc. As the marketing is controlled by the assemblers' function owing to the pettiness in shipping volume, the assembling system is customary. The functions such as assembling, collection, the control of demand and supply, and price formation have not been fixed yet. There is no institutional market. KHMMs not only are marketed through the premodern and customary transaction at quasi-markets but also pass through the marketing process of many stages. And the direct transaction is still in the stage of being attempted and has not been established yet. The standardization and processing level is inactive and low because of the characteristics of KHMMs and the insufficiencies in market management policies.

In order to improve the marketing system of KHMMs, it is necessary to develop measures such as the stabilization of KHMMs industry and the improvement of system, etc. To develop these measures, it is necessary to activate market functions, direct transaction and producers' systematization, to promote the differentiated marketing, to support the processing field, and to establish the policies of market management on KHMMs industries, etc.

It is urgent first of all to activate the assembling markets in producing areas and the wholesale markets in consumption areas, in order to activate market functions. For the purpose of activating the assembling markets in producing areas, it is desirable for the sound producers' groups to take part in such markets actively. And for the purpose of activating the wholesale markets in consumption areas, it is desirable to carry forward the supplement and reorganization of Daigu wholesale market for KHMMs, and to improve the method of KHMMs transaction through the reformation of Kyeongdong Market in Seoul, which is situated in the largest consumption area in Korea, into a legal wholesale market.

In order to activate direct transaction, it is requested to enhance the proportion of direct transaction by carrying forward the stable demand and supply of KHMMs through the extension and exhortation of the contract transaction between producers and demand firms. Also it is requested to strengthen the link with KHMMs processing in producing areas. The producers' organizations such as producers groups by agricultural items, farming cooperatives and agricultural cooperatives, etc. should actively take part in those processes, and then should enhance the bargaining power of transaction through the improvement of quality and the enhancement of goods character.

So as to overcome and improve the points at issue derived from the pettiness in scale, the systematization of producers should be carried forward. This systematization should be planned by making the present production scale into one which is enlarged through specialization and into the production in chief producing areas. And then this systematization could be induced by making those production system of which scale is petty into the type of cooperative production and common shipping. In view of support for the producers' organization, it is very necessary to establish a specialized cooperative for KHMMs in order to activate their industries through the improvement of marketing structure and the construction of their processing factories.

For the purpose of facilitating standardization and differentiated

marketing, etc. it is necessary to designate the items for standardization by stages, and to put a term to PR the standardization basis. Among the objects of standardization, the quality test must be enforced for items of high-priced KHMMs which require special management. And it is necessary to introduce the certificating system of quality which issues a quality certificate when the items meet the quality standard. So as to facilitate the demand on KHMMs and to hold down the overflow of imports through the differentiated marketing of KHMMs from the imported ones, the labelling of origin or marking and standardization should be enforced thoroughly.

To facilitate KHMMs processing, the link of their processing industries with producers' groups and the support for the processing industries should be carried forward. And in order to overcome and cope efficiently with the poor conditions of the processing business in producing areas, it is necessary to systematize the processing factories of KHMMs in producing areas, and to develop the system for synthetic processing link which aims at the support for KHMMs processing industries, and then to link together efficiently the half or simple processing factories of which raw materials are mainly KHMMs.

The policies of market management for KHMMs industries should place their focus on suggestion of the policies for production, marketing and import which aim at the demand on KHMMs in the long run, and on enforcement of the measures such as the certificating system of quality which guarantee the safeness of products, the quality of goods and the medicinal effect, etc. in the short run, to inform the excellency of KHMMs. So as to enforce effectively these policies, it is necessary to divide and arrange the roles of the organizations related to KHMMs such as the practical researches and guidance distributed by the organizations for research guidance, the planned production and shipping by producers' groups, etc.

Since the ineffeciencies in systematic management on markets which are brought about by the management system for KHMMs from two diffecent authorities of the government become a disturbing factor for the marketing markets, as is the case in the system for standard materials, it is necessary for the government to exercise its authority powerfully and to harmonize its duties between ministries rapidly. With a view to these, it is necessary to define the scope of

KHMMs clearly, and to devise a plan to establish an organization which can take charge of and control the entire stages from production to final consumption of KHMMs.

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