

〔国際シンポジウム報告〕

- I. 日本における農産物流通の現状と問題点
- II. 経済発展における農産物流通の近代化の課題

森 宏

まえがき

今年は2回、国際シンポジウムで、農産物流通について報告する機会を与えられた。1つは韓国の裡里市で円光大学 (Won Kwang University) 主催、アジア財団後援の第1回農産物流通に関する国際学術会議 (9月11~12日) と、2つはJETRO (日本貿易振興会) がヴェネゼラのカラカスで3月に行った見本市と併行して催された経済開発と工業化および農業の近代化に関するシンポジウム (3月8~9日) である。

前者では、日本における農産物流通の現状の問題点を概説し、後者では経済開発における農産物流通の問題点や近代化の方向にふれた。

最近、こうした問題について英文で書かれたものがなく、わが国を訪れる外国の研究者や、自由化問題等でわが国の流通機構に関心を寄せる外国の政府関係者達に、要領よくわが国の事情を知らせる手段に不足している現状を考え、社研の月報としては余り前例がないが、あえて原文のまゝけいさいしていたゞくことにした。

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I. AGRICULTURAL MARKETING IN JAPAN, WITH EMPHASIS
ON SOME PERISHABLE PRODUCTS

by Hiroshi Mori

1. Food Demand and Supply in Japan

The features of demand and supply situation in Japan is illustrated by the food balance sheet, 1974 fiscal year (Table 1).

Of important agricultural products, nearly all of rice, potatoes, vegetables, and hen eggs (consumed as food), respectively, comes from the domestic production. Some portion of fruits and nuts, meat, milk and milk products and oil and fats, respectively, is supplied from abroad.

On the other hand, we heavily rely upon imports from overseas for wheat for bread and noodles, barley, grain sorghum, corn, wheat and pulse for animal feed and oil and raw sugar for refined sugar.

The self sufficiency ratio for total agricultural products for food has come down from 90% in 1960 to 72% in 1974 as we have come to demand more and more feed grains for animal protein and raw materials for vegetable oils, and more meat and some foreign fruits.

2. Food Consumption and Purchasing Habits in Urban Areas

In 1975, the average urban household of 3.89 persons in size spent ¥51,168 (\$183.0; \$1.0:¥280) on food (including away from home consumption of ¥5,508) out of ¥157,982 (\$564.0) of the total expenditure per month (the Engel's coefficient being 32.4%).

Of this much expenditures on foods and related services, ¥7,088 (13.8%) is spent on "staple food" like rice (¥4,660), bread (¥1,128) and noodles (¥1,287), ¥6,335 (12.4%) on fish, ¥6,049 (11.8%) on meat, ¥3,338 (6.5%) on milk and eggs, ¥4,089 (8.0%) on vegetables, ¥3,000 (5.9%) on fruits, ¥3,130 (6.1%) on confectionaries, and so forth. In terms of absolute amount, the average household, in 1975, consumed about 200 kg of rice, 40 kg of bread, 25 kg of noodles, 50 kg of meat and meat products and twice as much fish and fish products as meat, about 250 kg of vegetables, 190 kg of fruits, etc. at home.

Remarkable changes which have taken place in food consumption in recent years are that people have come to consume less and less rice (349 kg in 1965 down to 257 kg and 199 kg in 1970 and 1975, respectively) and more and more meat (28 kg up to 40 kg and 50 kg for respective years), in particular.

According to the estimates by Ministry of Agriculture and Forestry (MAF), income elasticities of demand for major food items are as follows, rice: -0.90, beef: 1.36, pork: 1.52 (overestimates?), chicken: 0.84, fish: 0.37, milk: 0.58, egg: 0.31, vegetables: 0.64, fruits: 1.02, etc. From 1965 to 1970 and 1975, respectively, monthly income of an average urban worker household increased from ¥146,000 to ¥195,000 and ¥236,000 (all in 1975 Yen): i.e. by 33% and 61%, respectively. Changes in food consumption patterns seen above have occurred mainly in accordance with these income increases and changes in relative prices (fish and beef prices rose more sharply than pork and chicken, for example, as we shall see later in Table 4) and shifts in consumers' preferences to some extent.

Concerning food purchasing habits, the ordinary consumers in urban areas buy rice from rice retailers once or twice a month who deliver it to customers' home in 10 kg-sack in most

cases. Many of them also get such heavy items as beer (one or two dozens), Sake and soy-sauce and the like delivered home by placing orders to beverage retailers. Until a few years ago, most of milk used to be delivered home every morning in small glass bottles (180 cc each) by contracted milk retailers but now nearly half of households have come to buy it in larger paper containers (500 or 1,000 cc) at super markets or confectionary stores and the like, (this pattern started only) a few years ago. For such dry groceries as canned thing, instant coffee, mayonnaise, etc., they go to the grocery stores once in a while, like ordinary American housewives, although in much less amount.

For such perishable foods like fish, meat and vegetables, ordinary housewives go shopping almost everyday to nearby stores, whether they are small traditional speciality stores or super markets. According to various surveys on consumers' buying habits, Japanese housewives buy fish, meat or vegetables in small amount for the day's use or the two at the most, despite the fact that 99% of city households have a refrigerator or two and nearly half of them own cars for family uses.

3. Marketing System for Selected Food Products

Like many other Asian countries, Japanese agricultural production is carried on predominantly by small scale family farms* with a very few exceptions of broiler and egg production, some of which is done by large firm farms integrated with feed companies, etc. (* 70% of 4,953,000 farms cultivate land of 1.0 ha. or less, while those who cultivate 2.0 ha. or more account for only 8.2% of all farms in 1975. 160,000 dairy farms average 11.2 dairy cattle in size, 474,000 beef

cattle raising farms 3.9 head and 223,000 pig farms 34.5 pigs on feed in 1975, respectively, for example).

Japanese agriculture is also characterized by wide variety of crops which are produced in different climatic conditions in the narrow but fairly long latitude of land from south to north. We produce pineapple and sugar cane, for example, in Okinawa, southern-most island and Irish potatoes, rye and apples in Hokkaido, northern-most island.

On the other hand, most of the population (111.9 million in 1975) live in cities (ratio of farm population to total population: 20.7% in 1975). More than half of the population are settled in narrow area of "Pacific Megalopolis" stretching from Tokyo west to Nagoya, Osaka and Hiroshima.

Considering these facts, what are needed of our agricultural marketing are:

- 1) assembling products in small lots from the individual producers,
- 2) sorting them out into a certain grade classes, and
- 3) packing them in proper containers for transportation either by truck or rail (refer to Fig. 1) to distant city-markets.

These functions are now being done mostly by village or county agricultural cooperatives, of which virtually all farmers have long been members since the end of World War II. With certain agricultural products such as beef cattle, broiler, tea, apples, etc., local merchants or processor - integrated dealers play an important role, even greater than cooperatives, in assembling and shipping products. They, however, are not in the position to "exploit" farmers as they reportedly used to in pre-war years any longer because of farmers' much improved bargaining position due to the well established

cooperative organizations and better agricultural information systems.

Specific marketing channels for selected agricultural products such as rice, fruits and vegetables, pork and beef and milk are illustrated by Figs. 2, 3, 4 and 5, respectively.

4. Marketing Spreads for Major Food Products

According to the estimates by MAF based on Input-Output Tables of Japanese industries, domestic agricultural producers got ¥31.5 and importers ¥6.1, respectively, out of every ¥100 the final consumers spent on food and related services in 1970. It implies that marketing spreads between consumers and producers amounted to 62.4¢ of every food dollar, of which 23.6¢ was taken by distribution costs, 28.2¢ by various processing costs and the remaining 10.6¢ by eating and drinking place services. As is shown by Table 2, marketing spreads have become widened in percentage from 55.0% in 1960 to 56.9% in 1965 and 62.4% in 1970. Considering the fact that the comparable figures for U.S.A. rose from 65% in 1955 to 68% in 1968, the spread may have continued to increase a little bit further, hopefully not appreciably, ever since.

Marketing spreads for specific agricultural products are shown by Table 3. Readers must, however, note that these figures represent marketing margins for each commodity group which goes into direct home consumption alone but do not account those which are consumed in processed forms by industries or away from home. According to these statistics, one may be safe in assuming that the single largest component of food marketing costs is the retail margin, ranging from 20% to 35% of the retail prices, then followed by shipping cost

of 10 to 20%, wholesale margins of 3 to 5%, etc. (processing costs are not considered here).

5. Some Recent Problems and New Developments
in Food Marketing Front - with Particular
Emphasis on Moves to By-pass Central -
Wholesale Markets

Producers often complain that they are getting less and less cents out of every dollar consumers pay for the food they shipped. When processing and away from home consumptions accounted, they are right as we have seen in the previous section. When fresh produce, fresh meat, rice, etc. which are cooked at home are considered, however, it does not necessarily follow that farmers get less portion of consumers' dollars than before, say 10 years ago. It is proved indirectly by Table 4 which shows changes (rises) in prices of vegetables, fruits, beef, pork, and rice at various marketing stages for the period of 1965 - 1976.

If there have not been, percentage wise, any appreciable increases in marketing costs for major food products in the past decade or so, we have long known the fact that consumers' prices do not come down or even slightly go up for some time when producers' or wholesale prices decline. Such phenomena as this have been observed once in a while with beef, pork, and some fruits and vegetables, wholesale prices of which fluctuate from time to time. One of these examples is illustrated by Fig. 6 which shows the monthly price movements for beef both at retail and wholesale levels for 1972 - 1976.

As shown by Figs. 3 and 4 in Section 3, the major portion of fresh produce and fish are marketed through either one of

central wholesale markets in the bigger cities or some of local wholesale markets in the smaller cities, where prices of products consigned to receiving companies to sell are determined by open auction where jobbers and the larger retailers, both licenced by city authorities, participate as buyers.

As is generally the case with auction where everything put on sale must be cleared on the spot (stipulated by the Wholesale Act and city authority's regulations), prices do fluctuate day by day and week after week. Many people, knowledgeable about the food industry, agree that price fluctuations at the wholesale markets have become intolerably great these days. (Refer to Table 5.) This may be because, as final consumers become less price responsive in their demand for specific food commodities in accordance with the rise in their income levels, the equal amount of change in market supply tends to cause wider price fluctuations as is illustrated by Fig..7. One of other important factors which make for greater price changes is that super markets and H.R.I. (hotels, restaurants and institutions) have appreciably increased their market shares* in wholesale procurement. (* There is some estimate that super markets account for at least 30 to 40% of retail sales of perishable foods in the bigger cities like Tokyo or Osaka). It is mainly due to the fact that most of them set fairly inflexible merchandizing plans, including resale prices, much prior to the day of sale.

In response to these changes in the buying attitudes of consumers as well as retailers, moves to by-pass the wholesale markets, such as direct buying from farmers' cooperatives, contract shipment for certain period of time, or even contract production with groups of farmers began to appear a few years ago, with very limited success so far.

On the other hand, some of receiving-auction companies in the central markets which were prohibited from regulating market supply by law and regulation, i.e. they must receive whatever amounts producers consign them to sell, are beginning to go between some of food chains and some shippers (producers' coops, for example) to facilitate more stable transaction, in accordance with some loosening of the regulative restraints which became effective by 1971 Amendment of Wholesale Market Act.

Table 1.

Food Balance Sheet, 1974 Fiscal Year

Source: "Food Balance Sheet", Minister's Secretariat, Ministry of Agriculture and Forestry.

This table is based upon FAO's preparation guide. Period is one year from Apr. 1st to Mar. 31st of the following year. Total population used in calculating supplies per capita is 108.71 million (as of Oct. 1st, 1973) estimated by Bureau of Statistics, Office of the Prime Minister.

Commodity	Domestic production ¹⁾	Foreign trade ²⁾		Supplies for domestic consumption			Supplies per capita
		Imports	Exports	Pro-cessing	Net food ³⁾	Per year	
							1,000t
							kg
Cereals	12,838	19,922	297	32,133	3,115	13,614	123.0
Rice	12,292	63	271	12,033	754	9,920	89.7
Wheat	232	5,485	26	5,517	345	3,439	31.1
Barley	182	2,038	-	2,086	693	112	1.0
Naked barley	51	-	-	46	6	16	0.1
Maize	14	7,719	-	7,763	1,303	82	0.7
Kao-liang	-	4,354	-	4,367	5	3	0.0
Others	67	263	-	321	9	42	0.4
Potatoes & sweet potatoes	4,376	11	-	4,387	1,379	1,734	15.7
Starches	1,054	101	-	1,183	358	825	7.5
Pulse	436	3,441	0	4,151	2,938	1,036	9.4
Vegetables	15,634	360	1	15,993	-	12,570	113.7
Fruits & nuts	6,343	1,381	126	7,598	29	4,576	41.4
Meat	2,117	407	2	2,540	-	1,792	16.2
Hen eggs	1,793	41	-	1,834	-	1,549	14.0
Cow milk & milk products	4,876	1,033	-	5,878	-	5,723	51.8
Fishes & shellfishes	10,106	779	996	9,889	-	3,854	34.9
Seaweeds	140	23	5	158	24	134	1.2
Sugar							
Refined	2,974	1	23	2,982	21	2,937	26.6
Oils & fats	1,311	398	144	1,618	178	1,261	11.4
Vegetable	1,026	185	27	1,211	119	1,027	9.3
Animal	285	213	117	407	59	234	2.1
"Miso" bean paste	752	-	1	736	-	734	6.6
Soy	1,344	-	4	1,375	-	1,371	12.4
(Ref.) Alcoholic beverages	6,020	31	26	5,900	-	5,882	53.2

- 1) Including domestic goods from imported materials.
- 2) Vegetables, fruits & nuts and others of dried, or in airtight containers are converted as fresh. Excluding processing trade and the unfit for food.
- 3) Indicating practical volume of edible food for men, calculated by multiplying gross food by yield rate, and showing the volume of food bought by consumers, however not always being equal to the volume of food actually taken by the nation.

Table 2.

COMPONENTS OF FOOD CONSUMPTION EXPENDITURES, 1960, 1965 AND 1970

		1960	1965	1970
Producers' Receipts	Domestic Agriculture	% 39.3	% 36.9	% 31.5
	Imports	5.7	6.2	6.1
Distribution Costs	Commerce	15.9	18.2	21.5
	Transportation	2.0	2.5	2.1
Food Processing Costs		30.1	28.5	28.2
Eating & Drinking Place Services		7.0	7.7	10.6
Final Consumers' Spending		100.0	100.0	100.0

Sources: Division of Econ. Research, Minister's Secretariate, MAF

Table 3.

Marketing Margins* for Selected Food Products
as Percentages of Retail Prices

(Unit: %)

	Producers Prices	Shipping Costs	Wholesalers' Margins	Secondary Wholesalers' Margins	Retailers' Margins	Retail Prices
Rice	60 - 70	7 - 13	7 - 10		15 - 20	100.0
Beef & Pork	55 - 65	8 - 13	1 - 2	3 - 5	25 - 30	100.0
Fruits & Vegetables	30 - 60	10 - 25	4 - 6	0 - 10	20 - 40	100.0
Fish	30 - 45	15 - 20	3 - 4	5 - 10	30 - 40	100.0

* Author's very rough estimates. No comprehensive surveys on marketing margins by public agencies available.

Table 4. Changes in Price Indices of Selected Agricultural Products, at Retail, Wholesale and Farm Levels, 1965 - 1976

	Rice			Beef			Pork			Vegetables			Fruits		
	Retail	Whole-sale	Farm	Retail	Whole-sale	Farm	Retail	Whole-sale	Farm	Retail	Whole-sale	Farm	Retail	Whole-sale	Farm
1965	74.8	75.4	78.7	62.2	64.9	64.6	81.9	94.1	92.5	64.6	62.5	64.1	75.1	71.6	65.7
70	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
75	165.0	158.8	187.6	193.8	193.3	200.0	173.6	191.6	211.7	157.2	163.7	170.4	144.1	152.0	*
76	189.6	183.4	200.4	222.5	223.6	222.4	191.8	193.5	190.6	188.2	187.9	187.0	154.8	159.1	160.2

* not available at the time of tabulation

Source: Division of Econ. Research, Minister's Secretariate, MAF

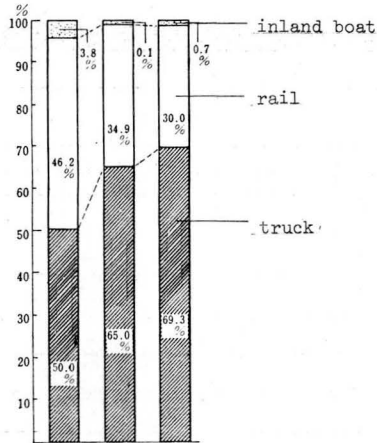
Table 5. Changes in Wholesale Prices of Cabbage in Tokyo Central Markets - 10 day Average

(Unit: Yen/Kg)

	February			March			April			May		
	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
1972	12	12	13	17	22	21	33	29	26	39	36	47
73	16	19	18	25	42	51	58	63	71	102	99	68
74	129	128	92	91	91	138	175	141	121	71	26	20
75	43	39	39	55	46	33	52	25	25	35	36	15

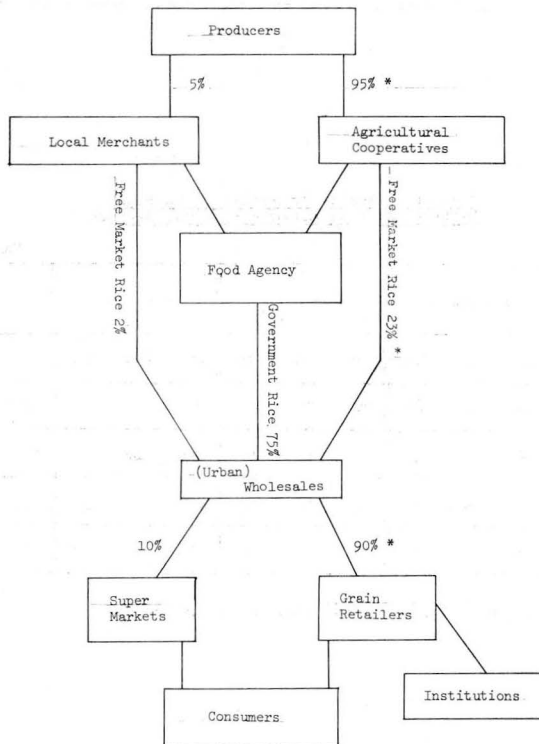
Sources: Division of Statistics and Information, MAF

Fig. 1.
Transportation of Perishable Agricultural Products,
by Rail, Truck and Others, 1968 - 1973



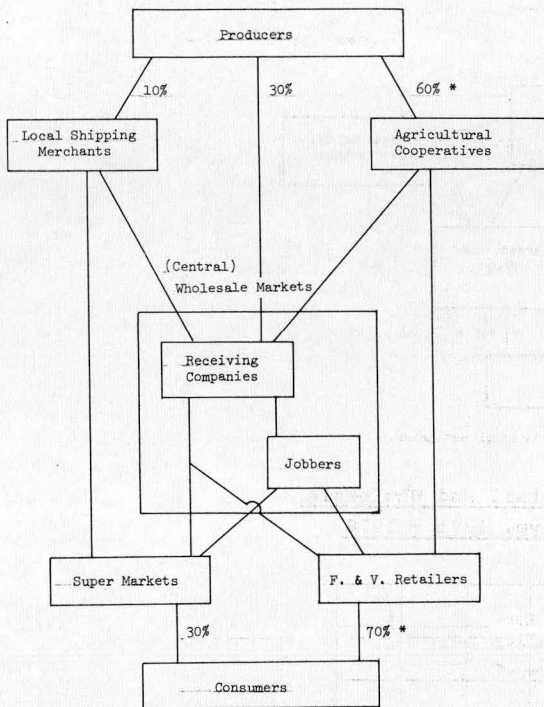
Sources: Bureau of Food Distribution, MAF.

Fig. 2. Major Marketing Channels for Rice



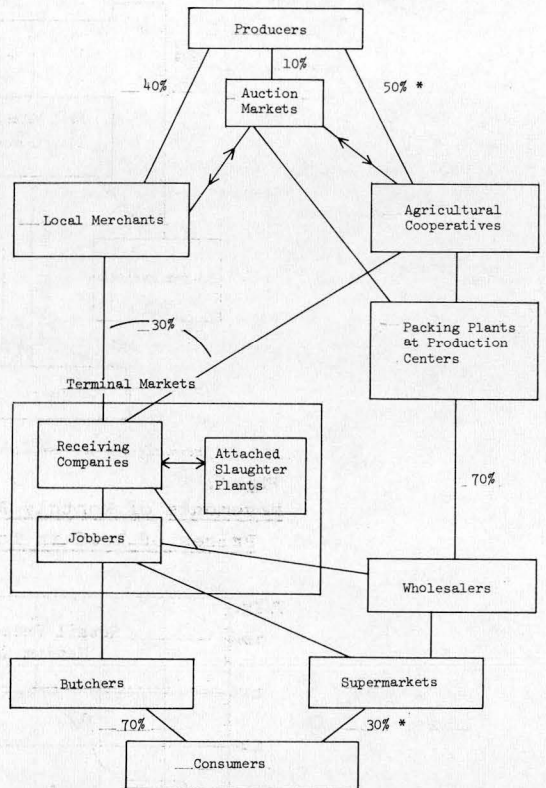
* All these figures are the author's rough estimates.

Fig. 3.
Major Marketing Channels for Fruits and Vegetables.



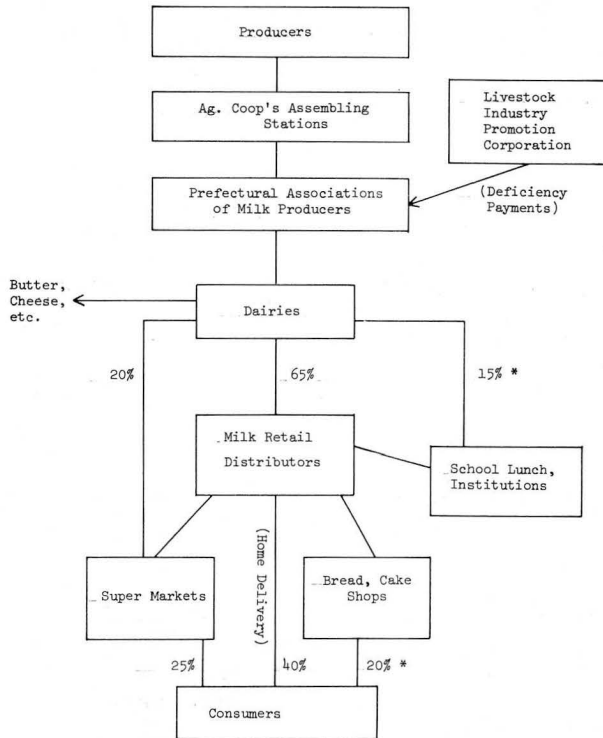
* All these figures are the author's rough estimates, and vary from commodity to commodity and area to area.

Fig. 4. Major Marketing Channels for Pork and Beef



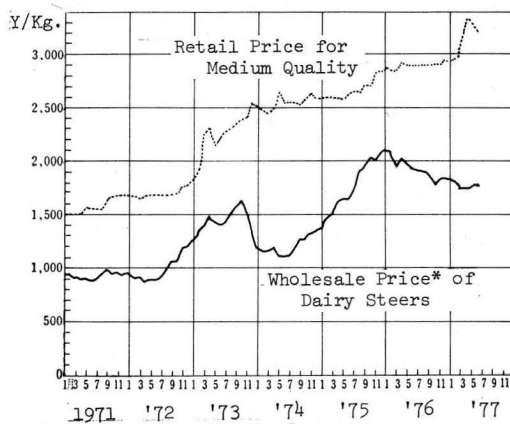
* All these figures are the author's very rough estimates, and may vary from beef to pork and area to area.

Fig. 5. Major Marketing Channels for (Fluid) Milk



* All these figures are the author's rough estimates.

Fig. 6. Movements of Monthly Retail and Wholesale Prices of Beef in Tokyo, 1971 - 1976



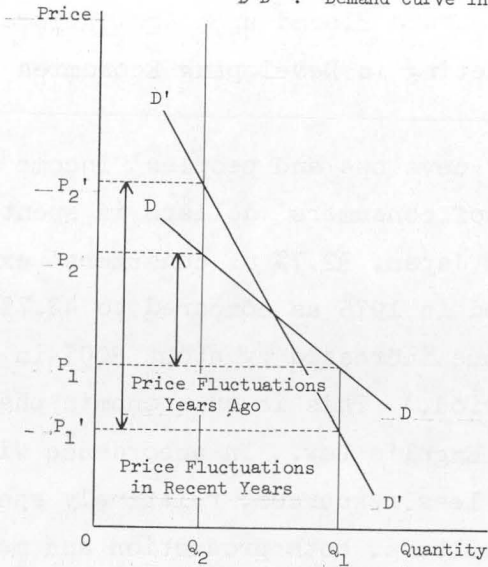
* retail-cuts equivalent

Sources: Ichiro Takahashi, "Beef Retail Markets and Prices", FOOD SCIENCE, No. 38, Oct. 1977.

Fig. 7. Effect of Decline in Demand Elasticities
on Market Price Fluctuations

DD : Demand Curve Years Ago

D'D' : Demand Curve in Recent Years



II. AGRICULTURAL MARKETING IN DEVELOPING ECONOMIES (ECONOMIC DEVELOPMENT AND MODERNIZATION OF AGRICULTURAL MARKETING)

1. The Burden Placed upon Agricultural Marketing in Developing Economies

As an economy develops and peoples' income grows, the smaller proportion of consumers' dollars is spent on food and related items. (In Japan, 32.7% of consumers' expenditures was directed on food in 1975 as compared to 42.7% in 1960 while peoples' income increased by about 300% in real terms during the same period.) This is an economic phenomenon generally known as Engel's Law. In accordance with this tendency, less and less resources, relatively speaking, will be input into agriculture, both production and marketing. This is a normal and even desirable pattern of economic development. It can not, however, be achieved automatically. One of the essential conditions for this normal development is that agricultural production and marketing should increase in productivity, possibly, at the parallel tempo with or not at significantly lower rate than non-agricultural sectors. Otherwise, higher prices of food and related services might absorb greater portion of consumers' dollars than before. And thus, it might significantly hinder or distort the desirable development in the growing economies (e.g., in this country, the consumers will have to depend more for imported foods).

Considering the fact that marketing accounts for more than half of consumers' food expenditures (refer to Table 1), it may not be very difficult to understand that the role the

food marketing should perform in the course of economic development should be quite critical.

2. What is Marketing?

Marketing is the economic activities to bridge consumption and production, which involve two basic aspects of functions. The one is the physical distribution of products, such as sorting, packing, hauling, storing and some processing etc. The other is, in my terminology, informational function of communicating the consumers' demand to producers or providing consumers with adequate knowledge for their better choice of consumption decisions. As the total production expands and more and more people move to live in distant cities, physical distribution must increase in size and length accordingly. This is not difficult to understand but it may not be very easy to achieve without new technologies and proper organizational settings.

At the same time, as consumers become more wealthier and more varied in needs or demand, it becomes more important and increasingly more difficult to predict accurately "who will demand what, when, where, why and how," with the due length of time in advance. Unless such informational functions as this be performed adequately, commodities produced will not be sold for proper prices or, on the other hand, consumers' demand will not be met for equitable prices. (For example, since 1970 on, Japanese rice farmers have been paid a quite a big sum of subsidies for not planting to 10% of their paddies. On the other hand, our beef prices are at least three times as high as in the U.S. and probably almost 10 times than in Australia.)

3. What are the Key Marketing Issues in Growing Economies?

a) Long-run considerations

At first, we must note that there are basically two types of foods, according to the nature of their demand. The one is a group of products called "superior goods," the demand for which increases as peoples' income rises. The other is "inferior goods," the demand for which does decrease as people become richer. Except for very poor economies where even subsistence level of living has not been attained, starchy food such as grains, potatoes, for example, belong to the latter category while meat, fruits and some vegetables and certain processed foods generally belong to the first. With that group of foods which fall into the first category, superior goods, physical distribution could be improved without serious difficulties, by merely expanding facilities and/or introducing new technologies at the same time.

However, with that type of foods, the demand for which tends to decrease or not to grow, it is, in many cases, rather much more difficult to improve the efficiency in marketing. Because, it is generally more difficult to get rid of surplus resources out of the industry than to induce them in and the economic incentives and competitive forces for the introduction of new technologies are usually lacking in the curtail-ing industries.

Considering the fact that grains, processed or unprocessed, potatoes and some vegetables categorized as "inferior goods" still account for the major portion of food expenditures, especially of poorer people, it is particularly important how to promote more efficient marketing of these products in the

developing economies.

As mentioned above, some products grow in demand and others decrease as the level of peoples' income rises. When income increases, say, by 50%, some may increase by 100% (income elasticity: $100\% \text{ divided by } 50\% = +2.0$) or others may only 20% ($e = 20\% \div 50\% = +0.4$). Foods are thus much varied in the degree of changes in demand caused by the income effect. It generally takes quite some time for ordinary agriculture to adjust production to demand, perhaps much longer periods than ordinary industrial production. Consider that it needs at least 5 ~ 10 years for orange trees to bear fruits after planting, not to mention the number of years required for the proper breeding of varieties. So it is vitally important for profitable farm management in micro sense and desirable allocation of resources in macro sense as well to predict the probable changes in demand for 5, 10 or many more years ahead. In addition to such income effects just described, there are equally important factors which affect future demand of foods. They include shifts in generation or family structure, changes in tastes and values, etc.

Thus, forecasting future consumers' demand, quantitatively as well as qualitatively is also one of the critically important roles which marketing should perform in the developing economies.

b) Short-run considerations

Besides such long-run problems just mentioned, marketing is expected to perform the more short-run functions as well. As people become richer, their food menus become more superior and at the same time more varied than before. (People may not be, in Japanese case, satisfied with the routine menu:

a few bowls of rice with soy bean soup and a little bit of fish or meat and some vegetables of limited kinds every day any longer.) People may want chicken for today's lunch and then special species of fish for the dinner. According to types of meat or fish and the ways they are cooked, different kinds of vegetables and fruits will be demanded.

Suppose many families may want "Sukiyaki" today because of cold weather, then it might tend to increase demand for certain vegetables appreciably as compared when most of them eat stakes or hamburger for today's dinner. Demand even for vegetables, which is generally conceived to be fairly stable, thus does change from day to day and week to week.

As people become wealthier, they become the less and less sensitive to prices of products they consume, in other words, they demand inflexible amounts of them even if their prices are high. This implies, on the other hand, they do not tend to consume more of these products even if their prices are almost nil. In terms of economics, demand for foods in general and for particular products as well become less and less "price-elastic" or more and more "price inelastic". Under these circumstances, if the supply in short-run, does not fit the demand, prices may go up sky-high or go down to nearly zero (as is shown by Table 5 in the preceding paper, AGRICULTURAL MARKETING IN JAPAN).

It is thus another very important task of marketing how to guide the supply to fit the demand on day to day or week to week basis, to avoid drastic price fluctuations which both producers and consumers do not seem to like to face. According to my own experience with food marketing people, many a time, they do not know why prices are so low (or high), say, this week, while supply does not seem too big (too small) as

compared with the same period last year or the preceding week. I have often heard them saying, "consumers do not tend to consume products when their prices are too low or vice-versa." This statement is nothing more than to testify their incompetence in apprehending the changes in demands for the products they handle.

c) Summing up

In market economy, prices are supposed to function as the guide for resource allocation or major conveyor of informations from consumers to producers or backwards. But considering the presence of inherent time lags required for the supply adjustment in agricultural production, the prices alone are not sufficient to achieve the informational roles to be performed by marketing.

4. How to Approach and Tackle with Marketing Problems

The best marketing system is such that it performs the various functions of bridging consumption and production, just described above in detail, at the possible minimum costs. And it is also essential in rather dynamic sense that the system should be organized so as to achieve progress as rapidly as or adjust itself to changes in outside conditions as flexibly as possible. Such as this is the system of highest performance.

In order to evaluate the existing marketing systems for different foods or agricultural products and to find out ways to enhance their performance, we ought to start, first of all, with drawing up marketing maps with the present distribution channels rightly placed in their relative importance and

estimating marketing costs incurring or margins realized at various stages of distribution and transactions, by some way or another.

Then we try to estimate the possible lowest costs, under the present technological and social conditions, to perform the actual functions being done by existing marketing agents or various stages of distribution channels. This is easy to say but most difficult to do. According to my own experiences, however, it is not quite impossible to ascertain rough measures of the possible lowest costs, by comparing with cases in advanced areas or foreign countries with similar conditions or other different commodities which are thought to be very well marketed. In other instances, we might build up a kind of engineering models by which the lowest costs of marketing or processing the products in mind could be calculated with the assumption of semi-idealistic conditions.

When we come to find the appreciable differences between the actual costs or margins and the "lowest possible costs" thus estimated, then we move to find out the causes for such differences or poor performances of existing systems. More often than not, major causes for the poor achievements include: lack of effective competition, poor coordination throughout the marketing channel from producers to consumers, inadequate infra-structures such as roads or information network, credit rationing to smaller farmers or dealers, so forth.

I have noticed in Japan many times and some other countries as well to some extent that the general public, both farmers and consumers, and sometimes even research people and government officials who are responsible for the systematic cure of the marketing problems they face, hold very strong, preoccupied, antagonistic feeling toward intermediaries as

"fat ugly middle men." Such feelings as this, not very well founded on the thoroughly investigated facts in many cases, do sometimes deter the effective remedies of the present systems. What we do need the most is the objective and scientific approaches to the problems we face. This does not, however, preclude the dire desire on the part of consumers to have lower food prices and at the same time the producers' wishes for higher prices for their products. What I want to say is that their wishes could only come true through the scientific approaches.

On behalf of Japanese marketing economists, I wish to thank you for this opportunity to discuss the marketing problems in developing economies we both are facing and we'd be most happy to cooperate with you in achieving our common goals to improve our agricultural marketing. Thank you again for your attention.

Table 1. Breakdown of Consumers' Food Expenditure in Japan

		1960	1965	1970	(%) U.S.A., 1968
Suppliers' Domestic Agr.	Receipt	39.3	36.9	31.5) 32.0
	Import	5.7	6.2	6.1	
Marketing Commerce	Margins	15.9	18.2	21.5) 68.0
	Transportation	2.0	2.5	2.1	
Food Processing Costs		30.1	28.5	28.2	
Restaurant Services		7.0	7.7	10.6	
Consumers' Expenditure		100.0	100.0	100.0	100.0