Agri-food supply chains and labelling systems in Japan

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CURRENT FEATURE OF AGRI-FOOD SUPPLY CHAINS

Key figures of Japanese agriculture

- **Land : 374,744 sqkm,**
  arable land :11%,
  permanent crops : 1%,
  permanent pastures : 2%,
  forest : 67%.
- Farm households : 3,291,000 (7.9% of total)
- Agricultural laborers : 2.56million (7.4%of total), over 65 years : 40%.
- Rice area per farm : 85a.
- **Average number of livestock per farm :**
  dairy cattle : 41.6 heads,
  beef cattle : 15 heads,
  pigs : 434 heads,
  layers : 2,644 birds,
  broilers : 90,733 birds.
- Production share of agricultural establishments (9,995) except farm households
  cultivated land : 4%,
  beef cattle : 15%,
  dairy cattle : 4%,
  pigs : 41%
  layers : 66%,
  broilers : 50%.
- **Living expense per family farm member : \1.3 million.**

Issues of agricultural structure in Japan

(1) Decreasing food supply capability ;
(2) Dwindling farm workforce ;
(3) Aging of core farmers ;
(4) Increasing abandonment of farm land ;
(5) Difficulty of fulfillment of multi-functional roles of agri-culture in rural area.

Table 1 : Changes in self-sufficiency rate for agricultural food and seafood (units : %)

	1965	1975	1985	1992	1993	1994	1995	1996
Rice	95	110	101	101	75	120	103	102
Wheat	28	4	114	12	10	9	7	7
Beans	25	9	8	6	4	5	5	5
Vegetables	100	99	95	90	88	86	85	86
Fruit	90	84	77	59	53	47	49	47
Eggs	100	97	98	97	96	96	96	96
Dairy products	86	81	85	81	80	72	72	72
Meats	90	77	811	65	64	60	57	56
Sugar	31	15	33	35	33	29	35	32
Seafood	109	102	96	83	76	70	75	69
Self-sufficiency rate(calorie)	73	54	52	46	37	46	42	42
S.S. rate for grain (food)	80	69	69	66	50	74	64	63
S.S. rate for feedstock	55	34	27	26	24	25	26	25

New basic law for food agriculture and rural areas established in 1999

- Guarantee food security and a stable food supply based on domestic agricultural production ;
- Enable agricultural and rural areas to fifull their multifunctional roles ;
- Promote sustainable agricultural development to maximise the potential of Japanese agriculture ;
- Ensure comprehensive development of rural areas as a basis for agricultural development.

Food policy

- -Setting a target for the food self-sufficiency ratio as a guide line for production and consumption ;
- -Formulating a food policy that the consumer's viewpoint, such as introduction of an improved food labelling system.

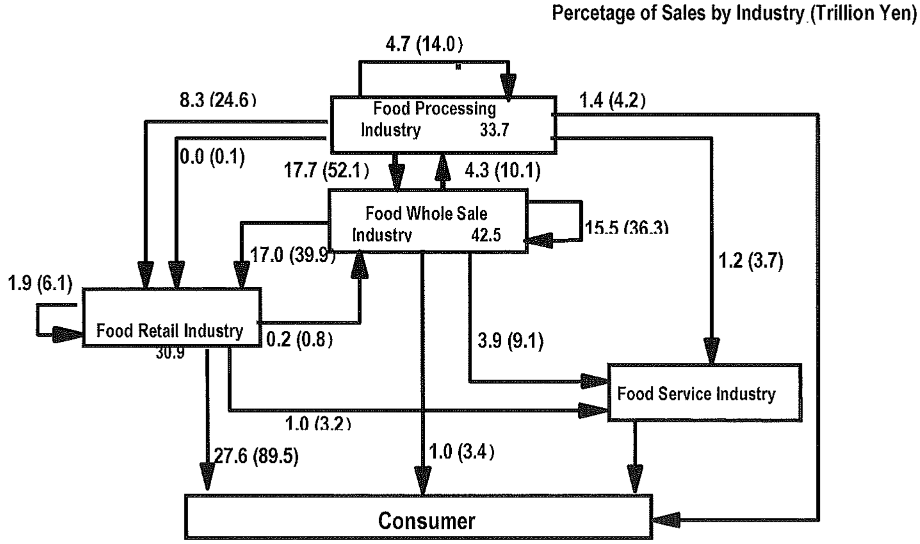
1.5. Outline of the food industry

- The gross domestic product (GDP)of the food-related industry, including such food production sector as agriculture and fisheries and processing and distribution sectors, is a about 51 trillion yen in 1997 and account for a little over 10% of the gross domestic product in general ;
- The proportion of agriculture and fisheries is decreasing, and that the processing and distribution sectors occupy increasingly significant position in the industry.

Table 2 : Changes in the gross domestic product of the food-related industry in Japan (unit : trillion yen, %)

	1975	1985	1993
Total of food industry	21.6(14.2)	39.2(12.1)	48.5(10.4)
Food production industry	5.4(3.5)	10.5(3.2)	12.9(2.8)
Related distribution industry	6.2(4.1)	11.8(3.6)	15.9(3.4)
Restaurants. .etc.	3.3(2.2)	7.4(2.3)	10.2(2.2)
Agriculture & fisheries	6.7(4.4)	9.4(2.9)	9.4(2.0)
Gross domestic product	152.4(100.0)	324.2(100.0)	466.8(100.0)

Figure 1 : Supply chains and sales of processed food in Japan (1998)



Food production Industry

- A high portion (99%) of small and medium firms with less than 300 employees ;
- The shipment amount of products in the food production industry account for 11% of that in the production industry in general, third position following the electric machinery industry, and the transport machinery and equipment industry ;
- The primary materials and processed food account 10% and 90% of shipment amount, recently the percentage of processed food has been increasing remarkably.

Food wholesale and retail industries

- 88 central wholesale markets in 56 cities and 1,600 local wholesale markets in Japan ;
- Perishables handled in wholesale markets represent about 80% of the total distributed volume of vegetables, fruits and marine products (beef : 41%, pork : 17%).

Wholesale food businesses

- 20% of the wholesale business trade in terms of the number of wholesalers and the sales volume.

Retail food business

- About 40% and 30% of all retail business trade in terms of the number or retail shops and the sales volume, respectively.

Current trends of wholesale and retail food business

- Supermarkets and convenience stores have increased their shares of food sales ;
- Small family-operated grocery stores have been losing their shares and decreasing in the number as they are replaced with chain-stores or enlarged in scale ;
- Supermarkets have improved their sales abilities and have started dealing directly with manufacturers.

Food service industry

- The food service industry has been growing rapidly since 1965. Factors :

(1) Changes in socio-economic conditions including improved standards of living, rising numbers of nuclear families and of working women, and increasing leisure time.

(2) The development and introduction of new type of business including fast-food and family restaurants.

(3) The improvement of technical and management standards in the food service industry.

Trend of Food Consumption

- Food consumption in Japan has almost reached a point of saturation in volume, with about 2,600 kcal per day on a calorie basis ;
- The so-called "Typical Japanese Dietary Pattern" was formed in the early 1970's ;
- In recent years, however, the gradual disappearance of this pattern due to unhealthy diets and the excesive intake of fats ;
- Accelerated use of cooked food and food services ;
- Diversified consumer demands.

Figure 2 : Evaluation toward the labelling system of the place of origin of fruits and vegetables and interest in item for labelling

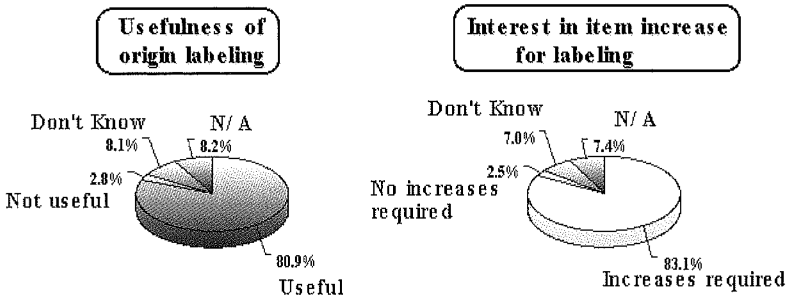
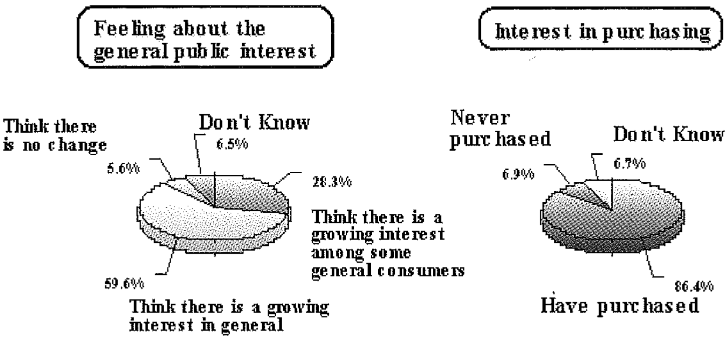


Figure 3 : Consumer interest in organic agricultural products and foods



SANCHOKU IN JAPAN

History of Sanchoku

- In 1960s
  - Agricultural chemicals ;
  - Artificial food additives ;
  - Wrong labelling ;
  - Standardisation of produce.
- Members' needs for safer and fresher foods.
- Other private sectors following *Sanchoku* policy.

What is Sanchoku

- Direct transaction of food between producers and co-operatives
- Vegetable, fruit, rice, meat, milk, egg, fish and processed foods using them are targeted as products for *Sanchoku*
- How to grow, prices, labelling method must be clarified in advance

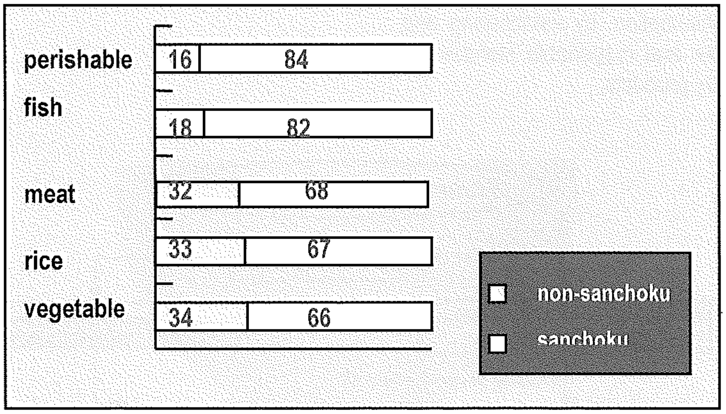
Three main features

- Production sites and producers are identified
- Growing methods are clear-cut
- Members have a chance to exchange views with producers

Status Quo 1

- Sales through *Sanchoku*
  2.5 billion US dollars
- Number of members who experience exchanging with producers
  50,000 per year

Status Quo 2



Advantages for Co-ops and Members

- Can get safer and fresher foods ;
- Can understand producers' situation ;
- Can enjoy nature and culture of rural areas ;
- Can cut costs by bypassing wholesalers ;
- Can be competitive.

Advantages for Producers

- Can get members' needs and desires ;
- Can save labor ;
- Can be motivated ;
- Can be healthier and more informative ;
- Can be more technical.

Current Problems and Future Challenges

- Obtaining adequate quantities ;
- Setting prices ;
- Improving production techniques ;
- Enhancing competitiveness.

Co-op Tokyo's Experiences

Membership	650,000
Sales	1.1 billion US dollars

Exchange with Producers in Co-op Tokyo

- Fresh product examination committee members regularly visit producers
- Members visit producers by bus
- "*Sanchoku* producers and members meeting" is held annually

LABELLING SYSTEMS FOR FOOD AND ORIGIN LABELLING IN JAPAN

Main laws relating to labelling systems

Law concerning standardisation and proper labelling of agricultural and forestry products (JAS) :

(1) Food sanitation law ;

(2) Law for the prevention of unjust premiums and misleading representation ;

(3) The measurement law ;

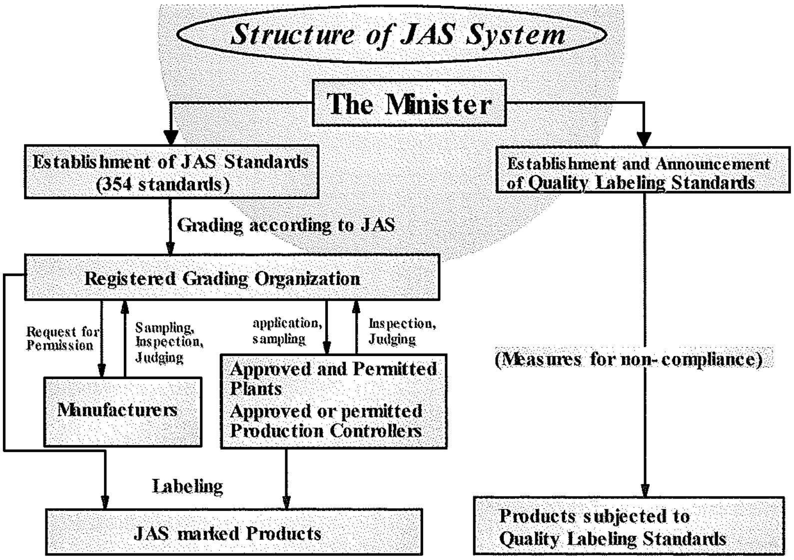
(4) Law of nutritional improvement.

JAS LAW

Law concerning standardisation and proper labelling of agricultural and forestry products (JAS) established in 1950.

Purpose :

- Improve the quality of agricultural and forestry products, rationalise production, correct transactions, rationalise use or consumption, by establishing and disseminating a proper and responable standard of agricultural and forestry products.
- Help consumers in general in their choice of products, by imposing proper labelling obligation with respect to the quality of agricultural and forestry products.



JAS System

(1) JAS Standard System

- Voluntary standard and certification system ;
- Products passed an examination of " grading" according to relevant JAS standards (354 standards) consisting of quality and labelling standards established by MAFF are authorised to bear JAS Mark ;
- JAS standards comprise standards of quality such as grade, ingredients, performance, production methods and standards of labelling.

(2) Quality labelling System

- Mandatory system ;
- Agricultural and Forestry products the quality of which consumers may find difficulty in distinguishing, such as processed food, are designated by a government ordinance.

(a) Agricultural and forestry products for which JAS standards have been established or are expected to be established in the near future,

(b) Agricultural and forestry products for which, due to properties of products, it is difficult to establish JAS standards and especially hard for general consumers to understand quality at the time of purchase.

- Labelling standards are established for each item of the products and include provisions for :
  1) Matters to be declared collectively on the label ;
  2) Methods of labelling and
  3) Matters not to be included in the label.
- Matters to be declared collectively include :
  a) Name of product,
  b) Ingredients (including food additives),
  c) Quantity of contents,
  d) Date,
  e) Name and address of manufacturer or vendor.

(1) Amendments to JAS system

- Introduction of every 5 year periodic review system of JAS ;
- Clear stipulation of "consideration of international standards" when JAS standards are amendments ;
- Foreign corporations will be able to register as grading organisations and registered certificate organisations in Japan.
- Manufacturers will be able to grade their own products with the permission of registered certification organisations.

(2) Amendments to food quality labelling system

- To mandate that all fresh foods, foodstuffs and beverages carry descriptions that include the prefecture or country of origin ;
- Currently nine vegetables must be labelled with the name of the product and the area of origin since September 1996 : 9 vegetables broccoli, taro, garlic, ginger roor, Japanese mushrooms, onions, snow peas, edible burdock and asparagus.

Results of place of origin labelling survey in Tokyo, Osaka, Kobe, Nagoya by MAFF in 1997

According to the report :

- 68% of the 133 retail shops surveyed indicated place of origin on their product labels ;
- Place of origin appeared on labels at all department stores and general supermarkets ;
- 73% of specialised food supermarkets and convenience stores ;
- 60% of small and medium-sized produce and ordinary food stores. ;
- In the Tokyo metropolitan area, 73% of all shops surveyed indicated place of origin, a higher percentage than either Osaka, Kobe or Nagoya ;
- Organically produced agricultural products are only allowed to be labelled "organic" after inspection and certification by a third party ;
- Imported organic food will be placed on the market in Japan labelled as organic, provided that they are inspected and certified under a system similar to the Japanese one.
- Definition of organic agricultural products and processed foods farm products cultivated for three years without chemical fertilisers or other agricultural chemicals and processed foods consisting at least 95% of organic products ;
- Government decided to mandate labelling of products made from GM crops begining in April 2001 and will submit an amendment draft to JAS Law in the middle of November in 1999.