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Food safety and security system in agri-food chains in Japan

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Background

In Japan, the first outbreak of BSE and a series of false indications for meat have resulted in a loss of confidence in food and have increased the distrust of consumers in the administration and agri-food industry. Therefore, it has become an urgent matter to restore the confidence of consumers by establishing a system of scientific inspection, guarantees, risk analysis and traceability of food, and making the information publicly available. In other words, in the entire process “from farm to table”, a safe and secured agri-food chain responding to the need of consumers should be established.

Agri-food chains of organic food

In Japan, consumer groups and co-operatives as pioneers in the movement requesting organic agricultural products and safe food have developed safe agri-food chains led by consumers. The development process of organic farming in Japan is briefly presented below.

- The movement of organic farming in Japan started in the period of rapid economic growth when in search of safe food consumers identified problems and cooperated with the producers who carried out the organic farming. This type of chain is the direct linkage between production and consumption.
- Although organic farming began as a grass-root movement, since the domestic market expanded in the late 1980s and a global market for organic food was formulated in the early 1990s, the domestic market (that did not have the standard of organic food) was subject to great confusion.
- The Codex Committee of FAO/WHO adopted the organic standard of crop products in 1999, and in 2001 it added the guidelines for livestock products.
- In adopting the Codex guidelines, the preparation of standards for organic products was required. Thus, the Japanese Agricultural Standard Law (the JAS Law) was amended in July 1999; it introduced the inspection and guarantee system for organic food except livestock products.

Actual situation of organic farming

The actual number of organic farmers in Japan, according to the Census of 2000, was only about 10,000 out of 3.2 million agricultural households in total. Moreover, the organic farmers who are recognized by a third-party organ are a mere 3,000 households. Since the climate of Japan is characterized by high temperature and humidity, insects and diseases tend to break out, thus full-scale organic farming is difficult to conduct. Moreover, due to the tiny size of farmland of individual agricultural households and the high cost of certification that has to be borne by the

producers, farmers are not keen to acquire the certificates of organic farming. Specific legislation to promote organic farming, like in the EU, does not exist in Japan.

Development of new, diversified, safe and secured agri-food chains in Japan

The “Sanchoku” (the direct transaction of food from production areas) through a partnership with producers (“Teikei”), in search of safe food for consumer groups and cooperatives, has been developed as a unique marketing system from producers to retailers in Japan. At present, almost all marketing enterprises have introduced the “Sanchoku” business, which becomes an important channel in the Japanese marketing system.

A safe and secured agri-food system by producers and entrepreneurs developed from the Sanchoku

Initially the Sanchoku and the Teikei were considered not to require examination/inspection by third parties. This is because of the following three specific features of the Sanchoku/Teikei:

- Production places and production methods are clear;
- Production and raising methods of products are clear; and
- Producers and consumers frequently communicate with each other.

In other words, the Sanchoku/Teikei is considered to be a chain in which producers can trace all information about production, thus traceability is guaranteed.

Such a movement has been developed under the leadership of consumers, but as the number of consumers who seek food safety and security increases, entrepreneurs of the agri-food industry are developing the chains led by consumers. Three examples of such types of chains are presented below.

The Zen-Noh (the National Federation of Agricultural Cooperative Associations) Security System

The first example is the “Zen-Noh” Security System. Zen-Noh is the largest marketing organization of agricultural cooperatives. After a Zen-Noh security system of beef was developed in 2000, it has been expanded to other agricultural products. The system is not necessarily a system of organic farming and organic animal husbandry, but a system in which the traceability is secured by considering the environment and health of consumers. This system has the following three characteristics: (i) to establish the production standards; (ii) to record all production history; and (iii) to make the production history known to the public. Furthermore, as a new project, the system tries to create new environmental indicators so that parents and children of consumers in urban areas learn about the biological diversity in producing areas by a method called “the survey of living things”.

The Nichirei “Kodawari” (obsession) food

The next example is a food developed by Nichirei, a large warehouse company as well as a manufacturer of frozen food. Nichirei responds to the need of consumers for high-quality food and develops and markets a private brand called “Kodawari livestock products” (including chickens raised with Chinese medicinal herbs, and natural pork and organic beef). Its five concepts are “safety”, “security”, “health”,

“deliciousness”, and “consideration for the environment”. To meet these concepts, it has built on its own the three frameworks: (i) a “kodawari” standard of livestock products; (ii) establishing traceability; and (iii) a quality-guarantee system by an independent body within the company.

Oisix e-commerce

Oisix is an e-commerce marketing industry of organic and natural food. Its specific features include: (i) to prepare the standards of handling commodities (regarding the applied amount of pesticides and chemical fertilizers, confirmation of production processes, presence of food additives, and taste); (ii) to provide information about commodities as detailed as possible by means of IT (the establishment of traceability, and public availability of information); (iii) its handling commodities are decided by a committee consisting of both food experts (academics) and consumers; (v) to engage in home delivery of milk and in catalogue sales; and (vi) a new entry into agriculture.

The common elements to the above three cases are to make efforts to establish traceability, and to introduce a quality-assessment method by third parties that can conduct an objective assessment, in responding to the increasing needs for safety and security.

New development of food-safety policy

Laws relating to food safety currently include: (i) the Animal Infectious-Diseases Control Law; (ii) the Feed-Safety Law; (iii) the JAS Law, those being under the Ministry of Agriculture, Forestry and Fisheries (MAFF); (iv) the Law Concerning Meat-Disposing Places; (v) the Law Concerning Food Hygiene; (vi) The Nutrition-Improvement Law, those being under the Ministry of Welfare and Labor (MWL); (vii) the Measuring Law under the Ministry of Economy and Industry; and (viii) the Law Concerning Gift Indication under the Fair-Trade Commission.

Among them, the JAS Law is involved in the indication of qualities and standards of agricultural products. The compulsory indication of organic agricultural products according to the Codex guidelines has been met by amendment of the JAS Law. The indication of product origins applied to genetically engineered agricultural products is also made in accordance with the JAS Law.

However, as it becomes evident that these laws, divided along the lines of several concerned ministries, could not cope with the occurrence of BSE and a series of false indications of food, it is an urgent issue to establish an organ that comprehensively controls the process from production to consumption, and to enact the related laws. Therefore, the Government of Japan decided to establish a food-safety agency. The agency should be independent from MAFF and MWL, but under the supervision of the Prime Minister’s office. The agency should be responsible for risk assessment and risk communication, but for the risk management the related ministries (MAFF and MWL) are responsible.

One of the distinct features of the new body is that it is comprised of five experts, but no representative of consumers is included. It requires several hundred public officials and the budget will be allocated through the concerned ministries. The new law will be enacted next year, and the existing Law Concerning Food Safety and the JAS Law will then be amended.

Conclusion

Apart from the establishment of a new administrative body and the enactment of new law, which are urgently required, it is necessary to make more efforts to develop agri-food chains led by consumers. For this purpose, the agri-food chain must be capable to carry out the risk analysis, the food indication system must be transparent and clear, and the traceability of food must be ensured. Furthermore, the consumer-led agri-food system should develop an autonomous standard through the partnership among producers, food industry and marketing entrepreneurs. Above all, the autonomous standard should cover all the stages from farm to table.