fied that it is the country that has attained the highest agricultural growth rate among the target countries during the period 1962-99 due to the increase in fertilizer application per land unit and rate of arable land (defined as arable land area plus permanent crops area over agricultural land area).

(8) With regard to Brazil, we clarified that its

influence on Japan will increase in the future due to the massive amount of developable land and the nonexistence of resource limitations in land area, that agricultural exports continue to expand without government subsidies, that it has the potential for becoming a major agricultural country ranking with the U.S., and that it has a central position among developing countries in the WTO.

Comparative Study of Institutions and Policies for Food Safety

Tomoko ICHIDA

1. Objectives

This study aims to analyze the trend of organizations and related associations for food safety, and changes of to labeling and examining systems in such countries as Europe and the United States. It focuses on institutions and policies for safety and traceability, mainly of the meat sector, comparing Japan and other countries. In the end it aims to clarify the extent of traceability and the relationship between cost-bearer and beneficiary.

2. Methods

(1) A case study on the beef traceability system in two German states was employed in November 2003, comparing a northern state, Lower Saxony (Niedersachsen) and a southern state, Bavaria (Bayern).

(2) In Japan, we examined how the beef traceability system initially implemented by prefectures and retailers changed after obligatory livestock identification was put into effect by the national government in December 2003.

3. Recent Trends in Beef Traceability Systems in EU and Germany

In February 2004, the total number of BSE cases in 15 EU countries amounts to 187,276, of which 182,170 are in the UK according to OIE, and 294 are in Germany. In 2003, the number of German cases is 54, although this is under examination because of check system error. Beef consumption in Germany drastically decreased after the first BSE case was revealed in 2000, but it has recovered to nearly the same level as before BSE.

The beef traceability system was implemented not only to guarantee the minimal standard of safety, but also for controlling

quality. In most cases the former is obligatory, while the latter is voluntary. Based on Reg. 1760/2000, the EU has made livestock identification and labeling of bovines obligatory in order to guarantee the minimal standard of safety for beef. Since September 1999, the German federal government has obliged all bovine holders to send information on their livestock's birth, movement, death, and slaughter to the nearest livestock database organizations. Each state has its own livestock database organization, while one company manages nation-wide. They are all engaged in collecting data from farmers, and updating and controlling the database. It is noteworthy that bovine holders must send the concerned information to the database organizations if they wish to receive a bull premium from the government.

Quality control of beef, on the other hand, is especially progressing in France, where the market for beef products are segmented by their origin and way of feeding, etc., and each of them is strictly identified and labeled. In northern German states, private companies voluntarily manage quality control, while in southern states, the state governments own their local food marks and are eager to market high-qualified local foods. In the Bavarian beef market, three types of labeling are used, and product suppliers can choose any: the QS mark, guaranteeing the nation-wide commonly legitimated minimal level of safety and quality; the GQ mark, showing higher-level than QS, and private brands of nation-wide supermarkets or food retailers. As to GQ, the Bavarian original local food logo, the quality standards became stricter than that of the nation-wide logo used QS, by prohibiting the use of anti-biotic growth hormone and the cutting of carcasses through the backbone. In both cases of QS and GQ, private-sector non-profit organizations examine and certify the concerned people once a year on commission of the state government (see Fig. 1).

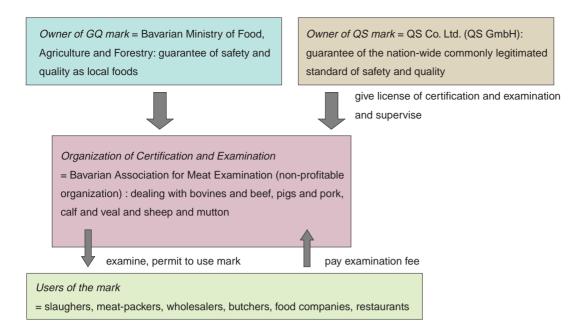


Fig. 1. The Procedure of Guaranteering Safety and Quality of Food: Meat Sector, Bavaria

4. Beef Traceability System in Recent Japan

In Japan as well, a beef traceability system is implemented in order to guarantee the minimal standard of safety and to control quality. After the national government obliged bovine holders to identify their livestock in December 2003, the beef traceability system voluntarily initiated by prefectures and retailers is changing in the following ways; first, the targets of the system are extended to livestock born and sold outside the prefecture, both the information transport from farms to retailers and the check of information with commodities are automated and made more efficient; second, information on feeding or chemicals, which are not obligatory at the national level, are shown to consumers and the aspect of controlling quality is more stressed; third, the relationship to the national identification system is not clear, the certification by neutral organizations are planned but not yet introduced.

5. Related Publications

Ichida, T. (2003) Quality Management and Safety Management on Beef through Traceability System, *Report of Consumer Cooperative Institute of Japan*, No. 40: 29-37.

Ichida, T. (2004) Safety Guarantee and Quality Control of Japanese Beef, Research on the Establishment of a Risk Management System for Food and Agriculture on the Viewpoint of Social Science, Research Paper of Risk Management Project 1:131-144.

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