

KEY ADDRESS

Environment of Food Security and Food Safety in East Asia: Toward Further Development of International Collaborative Education and Research

Prof. Masahiro Yamao
Hiroshima University

1 The Graduate School of Biosphere Science, Hiroshima University, is very pleased to hold the Second International Symposium on the Sustainable Development of the Food Industry, entitled with **“Environment of Food Security and Food Safety in East Asia: Towards Further Development of International Collaborative Education and Research.”** We held the 1st International Symposium in 2008, which forms the basis of this symposium with two main important agendas. The first agenda is **“Strategies towards an environment of safe and secure production and the establishment of responsible food chain/ system.”** The second concerns **“Development of food safety technology and the strengthening of food functionality for consumers’ demand.”**

2 The Graduate School of Biosphere Science has planned and implemented a series of comprehensive educational courses on food science with special attention to food safety and food security. In these courses, the current problems of the food production chain in Japan are identified. The flow of food from “Farm to Fork” is critically analyzed in depth, while the staff of the Graduate School of Biosphere Science has enthusiastically contributed to the technological development towards food safety.

3 Not only in Japan but also throughout the rest of the Asian region, a new regime of low-carbon food chain needs to enhance awareness building among those who are involved in the food industry. Eventually, it will be an imperative thrust to improve capacity-building among food chain managers who would adopt and monitor comprehensive food safety approaches. Consumers all over Asia are anxious and concerned with food safety. The food chain currently in effect in Asia has extended its capital, technological, marketing, and knowledge networks all over the world through the distribution of trained and efficient manpower. There is a greater need for all educational and research institutions to develop comprehensive and collaborative methods.

4 In the developed world, the rapid growth of new types of food business, like restaurant and fast food chains, super markets create the new type of food system covering over the process from production to consumption. East Asia is the largest center of the food industry in the world along with ever-increasing demand for value-added food such as ready-to-eat and ready-to-cook

products, in the developed world. Japan has so far provided a great impetus to capital accumulation and technological development of food industry in East Asia. It now depends heavily on the value-added products imported from China, Thailand, Indonesia and Vietnam, and so on, where export-oriented food industries have ever grown. Huge consumer markets in EU and USA import the food products from this region, too. Mass production system and stable distribution of standardized products in East Asia have been accepted widely. A strong, social request to the standardization of food production technology works effectively in agricultural, fisheries and any kinds of frozen products. Environmental standards, safety and hygienic technologies should be applied to the whole process of production, distribution, processing and consumption.

5 “Farm to Fork” management at East Asian level should be designed and implemented in proper way. “Food security and safety” in Japan is secured by “environment of food security and safety” in East Asia, and vice versa. Therefore, Hiroshima University is responsible for educating professionals who can manage agriculture, fisheries, and food manufacturing industry. These professionals become the leaders of establishing sustainable use of food resources, and environmental friendly food industries network, and the whole system of food chain at local, national and regional levels. They are expected to change a paradigm of the food chain currently in effect in East Asia into “responsible and safety system.

6 In collaboration with MOU-based partner universities in East Asia, such as Sichuan Agricultural University (China), Kasetsart University (Thailand), and Gajamada University (Indonesia), Hiroshima University plans for an international educational and research programs to develop comprehensive and collaborative methods to achieve food security and food safety in East Asia.

7 This symposium consists of two sessions addressing the two main agendas of the 1st International Symposium held in 2008. The objectives of the 2nd International Symposium are:

- 1) To identify the latest challenges and state-of-the-art topics in the specific fields;
- 2) To design feasible plans for collaborative education and research; and
- 3) To propose an overall strategy towards the development of environment of food security and food safety in East Asia.

8 It is reassuring that the Graduate School of Biosphere Science, Hiroshima University, is now planning educational and research agendas along these lines.