

Developing reliable, safe, green food supply chains

The food supply chain refers to the entire process of providing food and agricultural products from primary production through food manufacturing, distribution, and retail sales to the final consumers. In response to the increasing social demand for more environmentally friendly production systems, food supply chains are required to achieve better environmental performance. Thus, agriculture, food processors, and the distribution and retail industry are now working intensively to decrease environmental burdens associated with their economic activities.

To contribute to achieving that goal, the APO multicountry observational study mission on Developing Reliable, Safe, Green Food Supply Chains was held in Japan, 7–12 November 2011, to study the current status of greening food supply chains in Japan. Sixteen individuals from 14 APO member countries attended, comprising officers of ministries of agriculture or industry, representatives of food-



Comparing barley varieties as ingredients for different final products at Kirin Beer Park in Toride.

processing companies, and academic societies. The five main topics covered by the resource persons were: 1) Green Supply Chains, by Professor Saito, University of Chiba Graduate School of Horticulture, focusing on recycling models operated by farms, food processors, and retailers where food waste is recycled into organic fertilizer; 2) Promotion of Food Recycling Systems, by Japanese Ministry of Agriculture, Forestry and Fisheries Officer Noriyuki Okawa, who detailed government regulations to promote food waste recycling systems; 3) New Environmental Policy of Cooperatives, by Manager Toshikazu Oosawa, Japanese Consumers' Cooperation Union; 4) Life Cycle Assessment and Carbon Footprints, by Director Takehisa Kabeya, Japan Environmental Management Association for Industry; and 5) Material Flow Cost Accounting (MFCA), by Managing Director Hiroshi Tachikawa, Propharm Co., Ltd., who explained how MFCA related to greening supply chains.

The mission also included field visits where participants observed examples of food waste being reduced, recycled, and reused. At Saitama Recycling Management Center where numerous types of recycling units operate, participants observed how food packaging waste is converted into fuel. Food waste from restaurant kitchens at the Palace Hotel is efficiently recycled into organic fertilizer by compact facilities in the hotel and transported to farmers who supply the hotel with produce, thus forming a recycling chain. The Toride Beer Park of Kirin Breweries adopts various environmentally friendly practices such as reduction of greenhouse gas emissions and recycling of materials such as bottles, cases, and organic residue from the brewing process. ☺