

Summary of Session 3 : Current situation and future orientation of technology for food industries in Asia

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The countries participating in this session can be classified into 2 groups.

1 Agricultural base still has a potential for the development of postharvest and processing technologies to increase the productivity. These countries consist of China, Indonesia, Philippines and Thailand. Individual country viewpoints can be summarized as follows :

China

All scales of food industry, small, medium and large, require improvement, especially private enterprises. The instant food and fastfood industries are expanding rapidly. The countries intend to develop machinery and packaging industry locally to meet the demand in order to reduce postharvest losses and promote value-added products from agriculture produce.

Indonesia

Overall the food industry has contributed significantly to the GDP with high added value but the output is still low. The industry depends markedly on imported raw materials to process food products for both local and overseas markets. The main problems include competitiveness, quality and safety, especially in global markets.

Human resources in food science and technology to provide knowledge and expertise in research and development need to be strengthened for the local food industries, in particular.

Philippines

The future of the food grain industry is hampered by insufficient supplies due to the rapid increase of the population, inefficient use and high production cost. The government should provide effective loan management, storage facilities and infrastructure to market these commodities. For the non-grain industry, postharvest technology, handling and transportation from farm to market should be developed. The management quality system for the marketing of fresh produce requires the development of an appropriate infrastructure. At present, the level of technology of various operations in the food industry should be promoted to meet global standards.

Thailand

Agro-food industry has been developed for export for more than 25 years but the shortage of raw materials is still a problem due to inefficient management among growers and industries. At present, the industries are confronted with problems of high wages, high production cost, inadequate public facilities and lack of knowledge information. Academic institutions should provide services for food industries as needed. Cooperation between the private and public sectors is being promoted since the economic crisis due to the reduction of food exports.

2 In Japan, South Korea and Taiwan, the production of agro-food processed products

has tended to decrease while the imports are increasing .

Japan

The availability of raw materials is based on imports due to the high production cost of local raw materials. The export of processed food products is almost impossible. The food industries consist of a high percentage of small and large firms. The technology transfer system between the public and private sectors has been effective. Food control and safety systems have been implemented in the food industries, such as HACCP, ISO 9000 and ISO 14000. For raw materials from genetic-engineering sources, assessment systems for safety have been developed. The development of packaging technology to extend the shelf-life has been implemented nationwide and R & D in this field is promoted in the food industries. Since ISO 14000 has been adopted to reduce waste in the environment, the packaging materials used should be suitable for recycling and disposal.

South Korea

Food grain loss is still high during postharvest operations such as handling, transportation and storage. Presently, import of food products accounts for about 60 %, mainly grains. Minimal processing for fruits and vegetables has been developed to maintain the freshness and the consumption of ready-to-eat food products has increased more than local production.

Quarantine control system has been established to inspect quality and safety of imported raw materials to process food products due to consumers' demand.

Taiwan

The country has been confronted with the problems of high production cost of raw materials and high demand of the domestic market for processed foods since 1980. There has been a gradual increase in the amount of imported raw materials and processed food products. Even though, the food industry still needs to produce high quality products for export. With the high foreign competition, the investment in food business decreased by about 30 % in 1995. However, the top five food industries include slaughtering, feed, frozen food, rice husking and non-alcoholic beverages. The single largest export is frozen food which accounted for 60 % of the total food export in 1997. Food industries are used to struggle for survival. Many of them have adopted strategies of diversification, channel integration, strategic alliance and international cooperation, to secure food business in the market.