

Plenary-06

Strengthening Food Security through Food Quality Improvement – Focus on Grain Quality and Self-Sufficiency Rate

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[Abstract]

The concern about food security is rising as the unstable situation of food supply and demand due to the Covid-19 pandemic, climate change, and turbulent political situation. Korea's global food security index (GFSI), analyzed by the Economist Group, is considered good, but the level continuously decreases in comparing food security levels by country. In particular, Korea is highly dependent on food imports, and food and grain self-sufficiency rates continuously decrease. Therefore, increasing those rates to strengthen food security is urgent. Among the major grains, the self-sufficiency of wheat, corn, and soybeans, except rice, is relatively low. Unlike the decrease in the annual rice consumption, the annual wheat consumption has been continuously maintained or increased, which is required public-private efforts to increase the self-sufficiency rate of wheat. Applying the government's policies implemented to increase the self-sufficiency rate of rice in the past will help increase the self-sufficiency rate of wheat. In other words, expanding wheat production and infrastructure, stabilizing supply and demand, and establishing a distribution system can be applied. However, the processing capability of wheat and rice is different, which is necessary to improve wheat quality and processing technology to produce consumer-preferred wheat-based products. The wheat and flour quality can be improved through breeding, cultivation, post-harvest management, and milling. In addition, research on formulation, processes, packaging, and storage to improve the quality of wheat-based products should be done continuously. Overall, food security could be strengthened by expanding wheat production and consumption, improving wheat quality, and increasing wheat self-sufficiency.

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