



IUFOST

Strengthening Global Food Science
and Technology for Humanity

IUFOST International Forum and Declaration of Action

IUFOST Forum Pre World Food Day 2021 - Sustainable Food Systems
Approaches and Applications

October 7, 2021 07.00 –09.30 EDT North America. GMT-4, UTC - 4

Theme: Sharing Food Science and Technology models by country and region

The Forum's focus and purpose is to recognise and highlight some of the ongoing work of IUFOST Adhering Bodies and the policy framework in countries/ regions towards the Sustainable Development Goals. These models offer science- based evidence of local solutions that can be translated to global problems. This is a discussion platform between IUFOST members following the UN Food System Summit and prior to the celebration and recognition of World Food Day. One of the outcomes will be the Declaration released prior to World Food Day that will lead to the sustainable actions of IUFOST and its partners. The Declaration and IUFOST Action Plan that will follow will be reviewed and updated again during the IUFOST General Assembly at the World Congress in Singapore in October 31 – November 3, 2022.

Country Speakers (not necessarily in order of presenting)

IUFOST Japan (Mitsutoshi Nakajima)	CIFST China - TBD
KoSFoST Korea – (Cherl Ho Lee)	PATPI Indonesia (Ratih Dewanti)
NZIFST New Zealand ((Phil Bremer)	NIFST Nigeria (Charles Aworth)
ALACCTA (Central and South America Regional Association) (Ana Maria Quiros)	
SIFST Senegal (Cheikh Ndiaye)	MENA region, Lebanon (Lara Hanna Wakim)
India IUFOST Committee (PG Rao)	Swiss Committee to IUFOST (Alexander Mathys)*
Polish Academy of Sciences, Poland (Mariusz Piskula)	
Parera Canada, CODEX (Samuel Godefroy)	

Food Science and Technology Models of Korea

By Cherl-Ho Lee, Founder & Honorary Chairman, Korea Food Security Research Foundation
Emeritus Professor, Korea University

Thank you, Chairman, and thank you to IUFOST for inviting me to this forum.

The food self-sufficiency rate of Korea is very low compared to those of the OECD countries. Korea's self-sufficiency rate estimated by food calorie base was 35%, and that

of grain self-sufficiency was 21% in 2019. The low food self-sufficiency rate is caused mainly by the high population density (517 person/km²) and high animal food consumption.

The food industries in Korea perform important roles in importing, processing and distribution of food for the people. Food Science and Technology provides the basis of the food industries, and shapes national food policy making and consumer education. I would like to introduce an action model of alleviating food problems in Korea: The Korea Food Security Research Foundation (KFSRF).

(slide 1)

Korea Food Security Research Foundation
 대한민국농업기술연구원
 한국식품안전관리연구원

Food self-sufficiency rate of Korea:
 Food energy base- 35%, Grain base- 21% (2019)

Korea Food Security Research Foundation
 A voluntary NGO founded in 2010 by Food Scientists
 To assess global food problems, forecast their impact on Korean food security, and lead the policy-making and national campaign to raise people's awareness on the food issues.

Board of Trustees: CEOs of leading Korean food companies.
 Advisory Committee: Members of KcSFoST and KAST

On-going action:
 Food security seminars (1-26th meetings)
 Book publication (Food security series 1-11)
 Collection & dissemination of relevant news and materials
 National Movement for Food Self-sufficiency Action
 National Movement for Food Waste Reduction

Policy-making and Consumer education
 Collaboration with MAFFRA and Korea FDA

IUFoST

www.foodsecurity.or.kr

The Korea FSRF was established in 2010 by the voluntary food scientists in Korea to assess global food problems, forecast their impact on Korean food security, and lead the policy-making and national campaign to raise people's awareness on food issues.

The Foundation makes strenuous efforts to strengthen the food security function of the food industry in particular, and encourages the industry to fulfill its social responsibility.



The Board of Trustees is formed by CEOs of leading Korean food companies including CJ Jeiljedang, Daesang, Samyangsa and Nongshim. The Advisory Committee is made up of selected members of the Korean Society of Food Science and Technology and the Korean Academy of Science and Technology.

The Foundation has organized Food Security Seminars, and published books and reports on outcomes of the seminars. It operates an active internet home-page and a monthly electronic newsletter to collect and disseminate food security related news, articles and source materials. The Foundation led the National Movement for Food Self-sufficiency Action started in 2011, and started the National Movement for Food Waste Reduction in 2019, along with the Korea Food Education Network and Korean Women Consumer's Union. The goal of the Food Waste Reduction Movement is to reduce food waste by half by 2030, and, as a result, to elevate the food self-sufficiency rate to 50%.

The Foundation works closely with the Ministry of Agriculture, Food and Rural Affairs and the Korea Food and Drug Administration for policy-making and consumer education.

(slide 2)

<p>List of KFSRF Book Publication</p> <ul style="list-style-type: none"> Food War 2030 (2012) Globalization of Korean Food (2012) Korea Unification & Food Security (2012) Food Self-sufficiency (2014) Food policies of Korea, China & Japan (2017) World Grain Market (2018) Food Reserve Plan of Korean Peninsula (2019) Food Industry & Food Security (2019) Food Security Plan for National Crisis (2021) 	<p>Food Security Series</p> <ol style="list-style-type: none"> 1. Natrium, Health & Taste (2014) 2. Health Effect of Barley (2015) 3. Understanding GMO (2015) 4. Rice Revolution (2015) 5. Reducing Food Waste (2016) 6. Voices & Views: Why Biotech? (2016) 7. New Breeding Technology (2017) 8. Sweet Potato for the 21th Century (2017) 9. 4th Industrial Revolution & Food Industry (2018) 10. Yes GMOs! (2018) 11. Radioactivity, Radiation & Food Safety (2020)
<p>Policy Developments:</p> <ul style="list-style-type: none"> • National food self-sufficiency goals were elevated. • Attempts to expand GMO food labelling were blocked. • Labelling of Sell-by-date of food will be changed to Use-by-date in 2023. • "National Food Plan" with the vision of construction of sustainable food production and consumption system was announced in Sept. 2021 engaging MAFRA, KFDA, MHW, MOF and ME of Korean Government. 	

The Foundation has published nine books, from 'Food War 2030' in 2012 to 'Food Security Plan for National Crisis' in 2021. The Food Security Series issues were published from No. 1: Natrium, Health, and Taste, to No 11: Radioactivity, Radiation, and Food Safety.

Along with all the efforts of the Food Science and Technology communities in the last decade, some positive policy developments have been envisioned.

The national food self-sufficiency goals of MAFRA, which are usually set downwards, were

elevated since 2011, although the goals have never been met.

The attempts of anti-GMO groups to expand the labelling of GM foods have been effectively blocked because of science-based dialogues.

The long-lasting debate on the change of Sell-by-date labelling of food to Use-by-date was ended this year, and food products will be labelled Use-by-date beginning in 2023.

Recently, the Korean government announced a "National Food Plan", for the first time in its history, with a vision of sustainable food production and consumption systems. The plan contains three strategic areas: construction of a stable food supply system for the people, environmentally friendly food production and consumption, and securing the food access of lower income groups. The plan stresses detailed programs such as expanding food stockpile, local food plans, reduction of food waste, reduction of food access polarization, and more.

Thank you very much for your attention.

IUFOST Forum (October 7, 2021) Discussion (Cherl-Ho Lee)

The importance of food industry is increasing when the society develops. However, the governmental support to food industry sector is not enough compared to their contribution. For example, in Korea food industry covers 60% of national food supply, but the governmental budget for food industry is very small compared to those for farm and agricultural sectors. I think it is the case of most of the developing countries. Food industries are based on the Food Science and Technology, and create added value to agricultural products to combat against poverty and malnutrition. IUFOST should stress this point and advise UN bodies and the developing countries to support more budget and pay attention for the development of food industry. Food industry is no longer a private activity for profit only. It is an important and essential pipeline in the food supply chain guarding the resilient food security of a society. It is needed to strengthen the food security function of the food industry and encourage the industry to fulfill its social responsibility.

<Forum 소개>

국제식품과학기술연합(International Union of Food Science and Technology, IUFoST) 포럼

2021년도 세계 식량의 날(10월 16일) 기념 포럼 -

'지속가능한 식량체계 접근과 적용: 국가/지역별 식품과학기술 모델의 공유'

한국의 식품과학기술 모델- 발표자 이철호(한국식량안보연구재단 명예이사장)

