

Summary of the Recommendations

"Planetary health: STI for food systems transformation"

towards
the UN Food Systems Summit 2021
and
the Tokyo Nutrition for Growth Summit 2021

2nd September 2021

Advisory Board for Promoting Science and Technology Diplomacy

1. Objectives and the Background

Hunger and the various forms of malnutrition, the current global pandemic, climate crisis, and environmental degradation negatively affect human security, particularly for the most vulnerable. In order to pursue the highest attainable standard of health, wellbeing and equity worldwide, judicious attention should be paid to the Earth's natural systems. Within the current food systems that are related to hunger and malnutrition, various issues are observed, such as the loss of biodiversity, environmental deterioration, greenhouse gas emissions, and the tremendous amount of food waste. It is essential to accelerate global efforts to tackle these problems.

Reflecting deeply on these issues that our food systems have, Japan should contribute further to tackle hunger and malnutrition and transform food systems, through utilizing its world-leading STI in various fields, and leading the global discussions and international collaboration for practical implementations and applications of STI in society. This year's UN Food Systems Summit and the Tokyo Nutrition for Growth Summit could be good opportunities to enhance the presence of Japan's STI and add positive momentum to the global efforts.

Based on the current circumstances, the Advisory Board for Promoting Science and Technology Diplomacy puts forward some recommendations as follows.

2. STEP Initiative by STI

The Advisory Board suggests the "STEP (**S**ystems **T**ransformation to **E**nsure **P**lanetary health) Initiative by STI" to tackle hunger and malnutrition and promote food systems transformation that pays judicious attention to the Earth's natural systems. This initiative is to promote the active utilization of STI worldwide for the above-mentioned purposes and promote collaboration among various stakeholders, through compiling and making use of an STI showcase, and possibly a matching fund.

(Also, the Advisory Board suggests several messaging elements for the relevant Summit and diplomatic opportunities.)

Suggested actions

1) Compiling a showcase that presents the strengths of Japan's STI

From the viewpoint of "STI for Diplomacy", it is important to compile a showcase based on the strengths of Japan's STI, that lie in the areas such as curbing global warming, reducing environmental burden, disaster resilience, utilization of ocean and water, foods with function claims, the fusion of high- and low- technology, and so on. Also, it is essential to consider the applicability and adaptability in other countries. The showcase should include immediately applicable STI, and promising ones in the mid- and long-term, as mentioned in the Strategy MeaDRI(Measures for the achievement of Decarbonization and Resilience with Innovation, launched by the Ministry of Agriculture, Forestry, and Fisheries)¹, which puts forward the medium- and long-term strategies to achieve carbon-neutrality by 2050 and realize sustainable food systems. Furthermore, not only advanced STI but also simple or casual ones can be included in the showcase.

For transforming food systems by STI, the aspect of biodiversity is indispensable. The traditional Japanese rural landscape, "Satochi-Satoyama," is thought to be helpful to stop the loss of biodiversity and realize harmonized human-nature interactions. Japan has put forward the "SATOYAMA Initiative"² to the world. STI examples that contribute to the "SATOYAMA Initiative" could be adapted and utilized in developing countries. In addition, STI promoting a circular economy is essential.

Changing the diet, or selecting what to eat, is a crucial factor. Japan has evolved its nutrition policy for over 100 years based on scientific evidence, based on which Japan should share its experiences and relevant expertise, particularly for better health and preventing illness.

2) Leading the global efforts to promote the active utilization of STI by creating and making use of an STI showcase and a matching fund, through interactive dialogues with relevant stakeholders and in collaboration with international organizations

The STI showcase should expand its scale and dialogues with various inputs from other governments and all stakeholders. Also, it should be designed for all stakeholders to effectively access and leverage the relevant STI and to participate and contribute actively with strong ownership. In terms of the appropriate project management including the evaluation and the scaling-up, it would be effective to collaborate with an international organization or several international organizations, considering their expertise, impartiality and broad networks.

From the standpoint of "Diplomacy for STI," the STEP Initiative will encourage and strengthen international STI cooperation and demonstrate Japan's leadership on Science and Technology Diplomacy. This could result in enhancing the presence of Japan's STI

globally and strengthening the STI foundation of Japan for promoting international joint researches, in terms of "Diplomacy for STI."

3) Actively supporting countries and regions making development plans and policies by utilizing the showcased STI, collaboration across sectors, and interdisciplinary human resource development

As presented in "Science, Technology and Innovation to Achieve the SDGs and its Guiding Tool, the STI Roadmap"³ by the Advisory Board with previous members in 2018, the suitable STI and the best way of application could vary from country to country, due to the different social, economic, and cultural backgrounds. Thus, the customization of STI through close dialogues is the key, and expertise and experiences in various fields are needed, including marketing perspectives to enable behavioral change among people. It would be meaningful to support countries and regions to fully leverage STI by providing various resources including financial support and the relevant information, and by connecting relevant actors and networks to foster dialogues while utilizing diplomatic missions abroad and science and technology attachés.

Interdisciplinary human resources development and personnel exchange are essential both at home and abroad, across sectors and between Japan and the partner countries. These will foster effective use of STI and build the relationships of unwavering trust between Japan and the partner countries.

The Advisory Board counts on the role of the Ministry of Foreign Affairs while hoping that various stakeholders, such as the relevant ministries and agencies, researchers, and private sectors, co-create or work together to implement the recommendations under the so-called "All-Japan" system.

(END)

References

- 1.Ministry of Agriculture, Forestry and Fisheries (MAFF), Strategy for Sustainable Food Systems, MeaDRI, https://www.maff.go.jp/e/policies/env/env_policy/meadri.html
- 2.Ministry of the Environment (MOE), SATOYAMA INITIATIVE, <https://satoyama-initiative.org/about/>
- 3.Recommendation on the Science, Technology and Innovation (STI) Roadmap for the achievement of the United Nations Sustainable Development Goals (SDGs) by Science and Technology Advisor to the Foreign Minister(2018), https://www.mofa.go.jp/press/release/press4e_002829.html

* More background information is available in the full Report (Japanese only).

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The ministries and other relevant organizations participated in the discussions are listed below.

Ministry of Health, Labour and Welfare (MHLW)

Ministry of Agriculture, Forestry and Fisheries (MAFF)

Ministry of Education, Culture, Sports, Science and Technology (MEXT)

Ministry of the Environment (MOE)

Japan International Cooperation Agency (JICA)

Japan Science and Technology Agency (JST)

Japan International Research Center for Agricultural Sciences (JIRCAS)

National Institute of Advanced Industrial Science and Technology (AIST)

National Agriculture and Food Research Organization (NARO)