

# Study Group on Food, Ecosystems and Land Use to Overcome Global Warming

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**Subject** This study group was launched in April 2022 (and started its activities in June 2022) as the Study Group on Food, Ecosystems and Land Use to Overcome Global Warming, as the successor to the first stage North Pacific Marine Ecosystems Study Group (abbreviated name), following the publication of the final recommendations published in July 2022 (delayed by the COVID-19 pandemic).

Based on the final recommendations of the first stage, this study group was launched as the second stage with the aim of considering in a comprehensive, cross-sectional fashion the possible contributions through the improvement of agriculture, fisheries and aquaculture, and forests and forestry in reducing food loss and waste and developing alternative food sources.

The purpose of the study group was to study ecosystems and land use, including land degradation, reclamation, soil contamination, the thawing of permafrost, and the disappearance of wetlands, as well as measures to address marine pollutants caused by the flow of chemicals through rivers into seas from inland areas, marine ecosystems, and the ability of marine animals to absorb carbon dioxide and produce oxygen.

By proposing comprehensive solutions to tackle these challenges, the study group aims to provide direct and indirect support on issues relating to food, land, and ecosystems. The topics addressed, which concern food, biodiversity and ecosystems, climate change and land use,

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Subject cannot be tackled by a domestic response alone; they are foreign policy questions that need to be addressed from an international perspective. They also concern food security, and therefore represent a timely subject that makes an excellent fit with the purposes of the foundation. Another consideration was that the topic would be effective at promoting the activities of the foundation.

The group continued to consider these issues in fiscal year 2023. Outcomes included reports on a field trip to study nature-based solutions in the United States in June and July 2023, and an interim report on topics of discussion (recommendations) published in October 2023. The content of the recommendations were: 1. To make the natural water cycle a pillar of policy and research; 2. To address and correct sectionalism and short-term thinking in political organizations and research bodies; and 3. To place the collection of scientific data at the foundation of policy planning. These recommendations were shared widely with senior officials in the government and the Liberal Democratic Party and were widely reported in the media. These three points (recommendations) met with a more positive reception than we had initially expected, receiving positive encouragement from senior government officials and resonating with Diet members from the Liberal Democratic Party. In English translation, the recommendations were also widely read overseas, in the governments of various countries, international bodies, and in diplomatic missions abroad.

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**Subject** The group will continue to consider various issues relating to food, ecosystems, and land use in the second half of fiscal year 2023 (from January 2024), focusing on the fundamental subjects of the water cycle, correcting sectionalism in government, and using scientific data as a foundation, while also emphasizing international sustainability accounting. The group will compile and publish its final recommendations in fiscal year 2024 (due in July 2024).

**Background of the Study** The study group was newly launched as the Study Group on Food, Ecosystems and Land Use, as the successor to the first stage Study Group on the North Pacific Marine Ecosystems Study Group (abbreviated name), based on the discussion points (recommendations) provided twice by the first stage group and the final recommendations published in May 27, 2022. The study group has proposed (October 2023) 1. Making the natural water cycle a pillar of policy and research, 2. Correcting sectionalism and short-termism in political organizations and research bodies, and 3. Placing the collection of scientific data at the foundation of policy planning. The group has continued to pursue these key issues in fiscal year 2023.

**Summary of Research Results** The study group has successfully carried out its schedule of events in fiscal year 2023. In April–May 2023, a delegation led by former Minister of the Environment

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Summary of Research Results      Tsuyoshi Yamaguchi and Yosuke Tsuruho, former State Minister of Land, Infrastructure, Transport and Tourism, and including members of this study group, visited the US Council of Environmental Quality for an exchange of opinions and academic talks on a wide range of subjects relating to nature-based solutions and regenerating waterways by tapping the powers of nature. The study group also exchanged opinions with the Smithsonian Environmental Research Center and made scientific presentations to each other.

The delegation concluded a memorandum with the Maryland Department of Natural Resources concerning technology transfer and other matters relating to nature-based solutions, and drew up a pathway for the introduction of nature-based solutions into Japan in the years to come. The delegation also heard about efforts to preserve water quality in Chesapeake Bay, and visited the site of concrete specific NBS undertakings. These activities provided experience and on-site knowledge to the Diet members mentioned above and the members of this study group that will aid in the implementation and introduction of NBS in Japan.

The study group has carried out research on a wide range of topics, including food loss, cooperatives and activities to address climate change, undertakings on nature-based solutions in the United States, international sustainability

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Summary of Research Results	accounting standards and EU classification, and the current situation and outstanding issues with dams in the United States and Japan, such as the impacts on water quality, the environment, and fish ecosystems. Final recommendations will be put together in July 2024.
Period	June 30, 2023 to June 27, 2024

Date of meeting

Study Groups and Discussion Topics

FY2023

	Date	Main theme
#1	Friday, June 30, 2023	Report (part one) on NBS fieldtrip to the United States carried out April 29–May 8 Dr. Masayuki Komatsu (Leader) and Professor Masatoshi Matsumasa of Iwate Medical University
#2	Friday, July 28, 2023	Report (part two) on NBS fieldtrip to the United States carried out April 29–May 8 Professor Katsuhide Yokoyama of Tokyo Metropolitan University and Satoru Itagawa, senior research fellow, Kajima Technical Research Institute
#3	Friday, August 25, 2023	“International Sustainability Accounting Standards: IFRS, EFRAG, and Japanese Undertakings, from an Economical Perspective” Professor Yasuhiro Takarada, Faculty of Economics, Nanzan University Discussion points for recommendations 1. Ecosystems and land use (NBS) 2. International sustainability accounting (ISSB) 3. Credit (Maryland CFA)

	Date	Main theme
#4	Friday, September 29, 2023	<p>“Dams in Japan: Current Situation and Outstanding Issues”</p> <p>Yosuke Hattori, River Survey Officer and Director of the River Basin Management Office, Kyushu Regional Development Bureau, Ministry of Land, Infrastructure, Transport and Tourism</p> <p>Summary and selection of discussion points to be included in recommendations</p>
#5	Friday, October 27, 2023, 7 to 9 p.m.	<p>“Dam Removal in the United States and its Impact on Improvement of Water Quality and Fish Behavior”</p> <p>Dr. Matt Ogburn, Smithsonian Environmental Research Center</p>
#6	Monday, October 30, 2023, 10 a.m. to 12 p.m.	<p>“Stage 1 and Stage 2 of the IFRS/ISSB”</p> <p>Dr. Svetlana Sabelfeld, University of Gothenburg, Sweden</p>
#7	Friday, November 24, 2023, 7 to 9 p.m.	<p>“Nature-based Solutions: Wetlands, Designing Living Beaches, Selection of Materials, Monitoring, and Maintenance”</p> <p>Mr. Keith Binsted, Underwood &amp; Associates, USA</p>

	Date	Main theme
#8	Friday, January 26, 2024, 4 to 6 p.m.	“The Relationship between Forests and Fish Species” Dr. Ashley Steel, Forestry Officer, FAO
#9	Thursday, March 7, 2024	“Food loss and food banks,” (provisional title) Naoaki Tsukioka, Deputy Director, Food Service Industry and Food Cultures Division (Food Loss Reduction and Recycling), New Business and Food Industry Department, Minister’s Secretariat, Ministry of Agriculture, Forestry and Fisheries
#10	Thursday, March 21, 2024, 11 a.m. to 1 p.m.	“Earth, Natural Water Cycles, and Humanity” Professor Taikan Oki, Graduate School of Engineering, The University of Tokyo
#11	Friday, April 26, 2024	“Environmental Problems with Water and Legal Systems (River Act, Basic Act on the Environment, Water Supply Act)” Tetsuo Murakami, formerly professor at the College of Bioscience and Biotechnology, Chubu University

	Date	Main theme
#12	Friday, May 24, 2024, 8 to 10 a.m.	<p>“The Role of County Government and NGOs in the planning, implementation, evaluation, and monitoring of NBS Projects”</p> <p>Mr. Erik Michelsen, Senior Environmental Policy Officer, Department of Public Works, Deputy Director, Bureau of Watershed Protection and Restoration, Anne Arundel County; Ms. Sara Caldes, Riverkeeper</p>
#13	Friday, June 28, 2024	General discussion and consideration of secondary discussion points

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Members	<p><b>Dr. Masayuki Komatsu (Leader)</b>          Visiting Researcher, Kajima Institute of International Peace          Chair/President, Ecosystem Research Institute          Visiting Professor, Asian Growth Institute          President, Toto Enterprise Owners Society</p> <p><b>Nobuyuki Hiraizumi</b>          President, Kajima Institute of International Peace          Advisor, Kajima Corporation          Advisor, Avant Associates, Inc.          Director, The Board Director Training Institute of Japan</p> <p><b>Katsuhide Yokoyama, Ph.D. in Engineering.</b>          Professor, Department of Civil and Environmental          Engineering, Tokyo Metropolitan University</p> <p><b>Zentaro Kamei</b>          Senior Fellow, PHP Institute, Inc.          Specially Appointed Professor, Graduate School of Social          Design Studies, Rikkyo University</p> <p><b>Yasuhiro Takarada</b>          Professor, Faculty of Economics, Nanzan University</p> <p><b>Hiroshi Terashima</b>          Advisor, Japan Society of Ocean Policy          Former Executive Director, The Sasakawa Peace Foundation          Former President, Ocean Policy Research Institute, The          Sasakawa Peace Foundation</p> <p><b>Tatsunobu Kawasaki</b>          Former Advisor to The Daily Minato</p>
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Members

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Professor, Department of Biology Center of Liberal Arts & Sciences, Iwate Medical University

(Research Assistant)

**Tomoko Nakamura**

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Faculty of Economics, Hosei University

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Pew Marine Fellow

**Yasuhiro Sanada**

Guest researcher (and associate professor), Organization for

Regional and Inter-regional Studies, Waseda University

**Yusuke Ota**

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