

Concept Note of Public Seminar for Joint Research on DSS

Title: Public Seminar for joint research on dust and sand storms conducted by China, Japan, Korea (TEMM DSS)

Main theme: DSS and Climate Change

Date: August 20, 2026 from 12:00 to 13:30 (UTC+8, Mongolia time)

Venue: TSAGAADAI HALL-Room 170 in UNCCD COP17 Green Zone, Ulaanbaatar, Mongolia

Online Meeting Link:

<https://japanenvironmentalsanitationcenter.my.webex.com/japanenvironmentalsanitationcenter.my-en/j.php?MTID=m99751df86d8987f6ec0787c9fe918008>

Webex Meeting number (access code): 2510 214 6654

Webex Meeting password: vQUsD7Jec34 (87873753 when dialing from a video system)

1. Background

Dust and Sand Storms (DSS) remain one of the most significant environmental challenges in Northeast Asia, affecting air quality, human health, ecosystems, transportation, agriculture, and economic activities across national boundaries. The impacts of DSS are not limited to source regions but are often transported over long distances, affecting neighboring countries and demonstrating the need for strengthened regional collaboration. Recognizing the importance of strengthening scientific knowledge and cooperative action, China, Japan, and Korea have been conducting joint research on DSS in collaboration with Mongolia under the framework of the Tripartite Environment Ministers Meeting (TEMM) since 2008. This long-term collaboration has contributed to enhanced monitoring and forecasting capabilities, improved understanding of dust emission and transport processes, and strengthened information sharing among the participating countries.

In recent years, increasing attention has been paid to the interactions between climate change and DSS. Changes in temperature, precipitation patterns, vegetation cover, soil moisture, and the frequency of extreme weather events may significantly influence the DSS occurrence, intensity, transport pathways, and geographical distribution of dust storms. Furthermore, climate change may affect the magnitude and distribution of DSS impacts, presenting new challenges for scientific assessment, forecasting, and decision-making. Understanding these interactions is therefore becoming increasingly important for protecting public health, supporting sustainable development, and enhancing regional environmental resilience.

The public seminar will bring together researchers, experts, policymakers, and practitioners from China, Japan, Korea, Mongolia, and other stakeholders participating in UNCCD COP17. The seminar will serve as a platform to share the latest scientific findings, exchange experiences and perspectives, discuss key challenges related to climate change and DSS, and explore opportunities for strengthening regional cooperation and future joint research activities. The seminar will provide an opportunity to foster a common understanding of emerging DSS challenges and strengthen regional cooperation in responding to the impacts of climate change.

2. Objectives

The objectives of the workshop are to:

- Share recent scientific knowledge on the linkages between Dust and Sand Storms (DSS) and climate change.
- Exchange experiences and research progress among China, Japan, Korea, and Mongolia on DSS monitoring, assessment, and prediction.
- Enhance mutual understanding of climate change-related DSS issues in Northeast Asia.

3. Host

Ministry of the Environment, Japan (MOEJ)

Ministry of Environment and Climate Change, Mongolia (MECC)

4. Tentative schedule

Date: August 20, 2026

Time: 12:00-13:30 (UTC+8, Mongolia time)

5. Language

English/Mongolian (Simultaneous Interpretation)

6. Expected Participants

Members of the TEMM DSS and participants at UNCCD COP17, including:

- Policymakers and government officials from Mongolia and other Asian countries..
- Researchers and scientists working on DSS and climate change.
- Representatives from international organizations and research institutions.
- Experts and practitioners involved in DSS monitoring, forecasting, and management.

7. Contact persons

Dr. Keiichi SATO (Asia Center for Air Pollution Research), E-mail: ksato@acap.asia,
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8. Draft Program

MC: Dr. Toru HAYASHI, Asia Center for Air Pollution Research (ACAP) [Japan]

Moderator: Dr. Keiichi SATO, Asia Center for Air Pollution Research (ACAP)
[Japan]

12:00-12:05	Opening Remarks - Mr. Satoshi Watanabe, Director for International Cooperation, Environmental Management Bureau, Ministry of the Environment, Japan (MOEJ) - Mr. Battulga Erkhembayar, Director-General of National Agency Meteorology and Environmental Monitoring (NAMEM), Ministry of Environment and Climate Change (MECC), Mongolia
12:05-12:20	Study on Ecological Protection and Restoration Effects of China's Three-North Project - Dr. Zhirong Zheng (Chinese Research Academy of Environmental Sciences, China)
12:20-12:35	Progress in Integrated Research on Asian Dust Variability, Prediction, and Impacts in Japan - Dr. Keiya Yumimoto (Kyushu University, Japan)
12:35-12:50	A Review of the Relationship between Asian Dust Events over the Korean Peninsula and Climate Change - Ms. Young-Ah Kim (National Institute of Meteorological Sciences, Korea)
12:50-13:05	Climate change projection over Mongolia - Dr. Gomboluudev Purevjav (National Agency Meteorology and Environmental Monitoring, Mongolia)
13:05-13:25	Panel discussions on the challenges on impact of climate change on DSS (Panelists) - Dr. Liang Li (China National Environmental Monitoring Centre) - Dr. Keiya Yumimoto (Kyushu University, Japan) - Ms. Young-Ah Kim (National Institute of Meteorological Sciences, Korea)

	- Academician Dagvadorj Damdin (Former special envoy on climate change of Mongolia, Mongolian Academy of Sciences) The panelists will deliver comments regarding the below guiding questions. (15’) 1. How is climate change affecting the frequency, intensity, and geographical distribution of DSS in Northeast Asia? 2. What are the key scientific and technical challenges in assessing and predicting the impacts of climate change on DSS? 3. How can China, Japan, Korea and Mongolia strengthen regional cooperation to respond to climate change-related DSS challenges? Questions from the audience and answers. (5’)
13:25-13:30	Closing Remarks Mr. Satoshi Watanabe, Director for International Cooperation, Environmental Management Bureau, Ministry of the Environment, Japan (MOEJ)
18:20-20:00	RECEPTION (Venue: Staff Cafeteria at COP17 Green Zone)