

MEETING MINUTES

SIXTH MEETING OF THE TASK FORCE ON SOIL AND VEGETATION MONITORING SCIENTIFIC ADVISORY COMMITTEE (SAC) OF EANET

(Niigata, 20 November 2019)

I. Open by the Chair

1. The meeting was opened by Prof. Wilfrado Carandang, the Chair of the Task Force on Soil and Vegetation Monitoring of the EANET Scientific Advisory Committee.

II. Welcome remarks by the NC

2. Dr. Shiro Hatakeyama, Director General of Asia Center for Air Pollution Research (ACAP) as the Network Center for EANET, welcomed the member of the Task Force to Niigata, Japan. In his remarks, it was pointed out that studies on impacts of acid deposition and related air pollutants on natural ecosystems are important part of EANET activities. He also emphasized importance of the workshop on the regional impact assessment to be held back-to-back with the task force meeting, as one of the activities described in the Medium Term Plan for the EANET (2016-2020). Finally, he expected the participants to have enthusiastic discussions to reach a consensus on the future activities of EANET during the meeting.

III. Introductory remarks by the Chair

3. The Chair introduced the mandate of the Task Force, the current members, and provisional agenda of the meeting (EANET/ TFSV 6/3). As the alternate for Prof. Nik Majid, Malaysia, Dr. Roland Kueh Jui Heng attended the meeting.

IV. Adoption of agenda

4. The meeting adopted the agenda as proposed (EANET/ TFSV 6/4).

V. Review of activities in line with the current strategy paper (1):

Overview of the activities for the current term (2015 – 2020)

5. The Chair and Dr. Hiroyuki Sase reported major outputs from the activities for the current term from 2015 to 2020 (EANET/ TFSV 6/5).
6. Major topics in their presentations included the following:
 - Progress of the activities in line with the strategy paper was presented, which was reported in SAC19 in October 2019.
 - List of major outputs from the activities were introduced, which included a list of scientific publications from relevant projects, preparation of the manuscript on regional review of tree decline, establishment of the new catchment monitoring site in the Philippines, start of new relevant research projects, and so on.
7. The meeting reviewed the major outputs in the current term. Major discussion on this agenda included the following:
 - i. As a new scientific community in the region, Prof. Zhaozhong Feng introduced Asian Air Pollution Workshop (AAPW) and its relevant activities. It was informed that discussion sessions have been mainly conducted rather than presentation sessions in AAPW. Based on the discussion in AAPW, joint papers will be published soon.
 - ii. Dr. Marco A. Galang reported the progress of the regular catchment-scale monitoring in La Mesa Watershed. It was expected that hydrological monitoring would be established step by step, in addition to monitoring on stream water chemistry.
 - iii. The information included in the review of tree decline has been compiled 2 or 3 years ago. It was pointed out that the manuscript should be submitted to a journal as soon as possible not to be an out-of-date one.

VI. Review of activities in line with the current strategy paper (2):

Regional review of tree decline symptoms

8. On behalf of Dr. Masamichi Takahashi, Dr. H. Sase reported progress on regional review of tree decline symptoms (EANET/ TFSV 6/6). Prof. Z. Feng and Dr. Roland Kueh Jui Heng made additional explanations as coauthors.
9. The regional review was prepared by several Task Force members and their colleagues. Contributors from the Task Force includes Dr. M. Takahashi, Prof. Z. Feng, Dr. Tatiana Mikhailova, Dr. R. Kueh Jui Heng, Prof, Nik Muhamad Majid, and Dr. H. Sase. They are planning to submit the manuscript to an international journal for

publication. The current manuscript of the regional review included the following contents:

- Air pollution conditions in the EANET sites
- List of tree decline phenomena reported in China, Japan, Republic of Korea, and Russia, and their suggested causes
- Effects of haze in Malaysia

10. The meeting reviewed the regional review. Major discussion on this agenda included the following:

- i. It was clarified that severity of decline symptoms in each area could not be compiled in the manuscript.
- ii. Recently, air quality in the region has been improving due to relevant governmental policies in the EANET countries. It was suggested that this should be mentioned to the manuscript to avoid possible misleading of readers.
- iii. It was clarified that the manuscript was prepared based on already-published literatures for last several decades and did not show the current condition. The review shows historical conditions in the region.

11. The authors may revise the manuscript as appropriate taking account of the comments above and submit it for publication.

12. Additionally, as a scientific topic relevant to the activities, Dr. Sijin Lu presented “*Soil pH monitoring quality control in China*” (EANET/TFSV 6/6/2). It was pointed out that data quality of soil pH would be important for setting environmental standards on soil pollution.

VII. Update of the strategy paper:

13. The NC as the Secretariat of the Task Force explained fundamental conditions on update of the strategy paper (EANET/ TFSV 6/7/1).

14. Major points of the explanation included following:

- The current strategy paper has already described importance of air pollutants, such as ozone and particulate matters.
- According to the suggestion at the 14th Session of the Scientific Advisory Committee (SAC14), the main text will not significantly be changed to keep the long-term directions and activities. However, slight modifications may be necessary to adjust to the latest discussion in the EANET community and scientific knowledge.

- The specific activities for the next term from 2021 to 2025 will mainly be updated in this process. Selected activities taking account of their feasibilities will be described and attached as the annex (not to become too ambitious for the EANET community).

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15. The meeting agreed with the conditions above.
16. The Chair explained the draft updated strategy paper (EANET/ TFSV 6/7/2), especially for the main text.
17. The meeting reviewed the main text of draft updated strategy paper. Major discussion on this agenda included the following:
 - i. The wording, “East Asian region”, is often used to express “Northeast Asia”. To avoid the possible misunderstanding, “EANET region” is used in the updated strategy paper, because the document is just for the EANET community. It was suggested that definition of the EANET region was not so clear, however, all EANET countries could certainly be included in this wording.
 - ii. The long-term objective of soil and vegetation monitoring is defined as “To assess impact of *acid deposition* on terrestrial ecosystem...” It was suggested that “air pollution” would be more appropriate than “acid deposition” in a scientific point of view. It was clarified that the objective was described in official technical documents of the EANET, such as Monitoring Guideline and Technical Manual. It was suggested that the wording would be changed depending on discussion of the EANET scope in the near future.
 - iii. Dry deposition of particulate matters into forest area is a removal process of those from atmosphere. It was suggested that urban trees be more highlighted to consider such an ecological service.
18. The main text of draft updated strategy paper was modified as appropriate according to the suggestions above.

VIII. Update of the specific activities for the next term (2021 – 2025):

19. The NC explained the draft updated strategy paper (EANET/ TFSV 6/7/2), especially for the specific activities for the next term from 2021 to 2025 in the annex.
20. Major points of the explanation included following:
 - Only three activities were left as the specific activities for the next term taking account of the feasibility, which included:
 - i. *Accumulation of information on air pollution effects in forest area and agricultural field*

ii. Promotion of catchment analysis

iii. Promotion of regional impact assessment

- As for the activity i) above, tropospheric ozone should be highlighted as one of the largest stressors for ecosystems. A project plan for the trial campaign for ozone effects will be developed.
- As for the activity ii) above, the regular catchment-scale monitoring in existing EANET sites will be continued by the respective countries. Taking account of multiple factors, including climate change and ozone, new design/scheme on integrated assessment and monitoring will be discussed inside/outside the EANET community.
- As for the activity iii) above, referring to the outcomes from the “Workshop on regional impact assessment of atmospheric deposition and air pollution on forest ecosystems”, held on 21-22 November 2019, Niigata, Japan, possible design/ scheme on the regional impact assessment would be discussed within the term.

21. The meeting reviewed the annex of draft updated strategy paper. Major discussion on this agenda included the following:

- i. It was suggested that tropospheric ozone be expressed as a “phytotoxic stressor”.
- ii. It was suggested that ICP Vegetation be included as a possible collaborator for ozone in addition to ICP Forests.

22. The specific activities in the annex of draft updated strategy paper were modified as appropriate according to the suggestions above.

IX. Closing of the meeting

The meeting was successfully finished and closed officially by the Chair.

Annex**MEETING AGENDA (including timetable)**

	<u>Possible speakers/ contributors</u>
09:00-09:10	
1. Open by the Chair	Prof. Carandang, Chair of TFSVM
2. Welcome remarks by the NC	Dr. Shiro Hatakeyama
09:10-09:20	
3. Introductory remarks by the Chair	Chair
09:20-09:30	
4. Adoption of agenda	Chair
09:30-10:30	
5. Review of activities in line with the current strategy paper (1): Overview of the activities for the current term (2015 – 2020)	Prof. Carandang Dr. Sase
10:30-11:00 Coffee break	
11:00-12:00	
6. Review of activities in line with the current strategy paper (2): Regional review of tree decline symptoms	Dr. Sase (on behalf of Dr. Takahashi)
6-2 Topics: Soil pH monitoring quality control in China	Dr. Lu
12:00-13:30 Lunch	
13:30-15:00	
7. Update of the strategy paper:	NC All
15:00-15:30 Coffee break	
15:30-17:00	
8. Update of the specific activities for the next term (2021 – 2025):	NC All
17:00	
9. Closing of the meeting	Chair
17:15 Departure for the hotel	

The 6th Meeting of the Task Force on Soil and Vegetation Monitoring of EANET
20 November 2019, Niigata, Japan

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