

The Third Workshop on Public Awareness for Acid Deposition Problems
20 - 21 February 2003, Niigata, Japan

CHAIRPERSON'S SUMMARY

1. The Third Workshop on Public Awareness for Acid Deposition Problems was held in Niigata, Japan, from 20 to 21 February 2003, organized by the Network Center for the Acid Deposition Monitoring Network in East Asia (EANET), in collaboration with the Joetsu Environmental Science Center (JOESC) of Japan.

Attendance

2. The Workshop was attended by approximately thirty participants and observers from Cambodia, China, Indonesia, Japan, Lao P.D.R., Malaysia, Mongolia, Russia, Thailand and Viet Nam. The list of participants is attached as Annex.

Background and Purpose

3. The Interim Network Center/The Network Center (INC/NC) for EANET has implemented the joint projects with China, Indonesia, Malaysia, Mongolia, the Philippines, Thailand and Viet Nam to develop their own brochures/videotape for public awareness since Japanese Fiscal Year 1999. NC held a Workshop on Public Awareness for Acid Deposition Problems in February 2001 in Niigata, Japan attended by participants from relevant countries. In February 2002, NC held the Second Workshop in Beijing, China attended by participants from all the participating countries of EANET.
4. To further encourage and promote such activities in each participating country, NC undertook the Third Workshop on Public Awareness for Acid Deposition Problems for exchanging of information and sharing of experience.

Opening

5. The Workshop commenced with the opening address by Mr. Jiang Wei, Coordinator,

the Secretariat for EANET.

6. Dr. Tsumugu Totsuka, Director General of the Acid Deposition and Oxidant Research Center, serving as NC, introduced the objectives of Workshop in his opening speech.
7. Ms. Kusmulyani Sugiarto of Indonesia and Prof. Munetsugu Kawashima of Japan were elected as Co-chairpersons of the Workshop.

Keynote speech

8. The keynote speech entitled "Environmental Education from the Bottom Up" was delivered by Dr. Bishnu Bhandari, Senior Research Fellow, the Institute for Global Environmental Strategies (IGES) as an expert on environmental education. He clarified the concept of "environmental education", explaining its difference from others such as "conservation education" and "earth education". Relevant activities at global level, regional level and grassroots level were introduced. Based on lessons from successful cases as well as failures, he emphasized that environmental education needs the collaboration of different professionals, actors and sectors.

Introduction of the progress of EANET activities on public awareness

9. Introduction of the progress of EANET activities on public awareness was presented by Mr. Jiro Sato, NC with coverage of the background, short history and institutional arrangement of the EANET and previous activities to enhance public awareness on acid deposition problems.

Presentations on country experience

10. Mr. Chrin Sokha made a presentation on the management and constraints for environmental problems, especially air pollution problems in Cambodia. Sub-Decree on Air Pollution and Noise Disturbance on July 10, 2000 including emission standard for mobile and stationary sources was approved and some air monitoring activities has implemented. Due to many constraints of recovering from domestic unrest until the end of 1980s, it is difficult to sufficiently make the plan and carry out the survey of air pollution and acid deposition so far. However, considering the

possible acid deposition problem such as adverse effects on important heritages, some measurements aiming to increase public awareness has been set up.

11. Ms. Bai Lu firstly introduced the access of the China to the environmental problems by “the National Tenth Five-year Plan for Environmental protection” and “the Tenth Five-year Plan for Acid Rain and SO₂ Pollution prevention in Two-controlling Zones”. In 2005, the amount of SO₂ will be reduced at the rate of 20% basing on the amount in 2000 according to the plans. Activities on promoting the public awareness for acid deposition problems also showed such as compiling brochures, developing videos, publishing annual environment report, utilizing news media, several campaigns of crane girls and waste sculpture competition etc., awards of “Earth Cup” and “Ford Environment Award” as well as domestic monitoring activities started from the end of 1970’s. The responsibility of the government and NGOs to provide environmental information to the public was pointed out.

12. Ms. Kusmulyani Sugiarto delivered a presentation on the public awareness campaign in Indonesia that seminars for topics of Ozone Layer protection, Climate Change and Acid Deposition targeting government officers, companies, lectures of universities and school teachers were conducted by the government, and the road show to provide information of the impact of acid deposition to schools by showing the China’s VCD and discussion about the acid deposition issues with the students in schools as an extra curriculum have been conducted by a NGO. Although there are peculiar constraints such as many languages due to archipelago, uneven level of knowledge and lack of environmental science in curriculum for elementary and high school etc., brochures have been disseminated to many cities and utilized effectively to promote public awareness.

13. Ms. Motoko Egashira presented environmental education activities on acid deposition problems using the brochure developed for public awareness/environmental education in science class of a junior high school in Tokyo, Japan. Students of the school used the brochure, before, during and after the class, and implemented experiments of sampling and analysis of rain water, making sound of electric organ (music box) and measurement of EC for frozen rain water,

tapped water and pure water. They found interesting results from the experiments and were raised their will to further challenge the learning. Mr. Ryo Mori made a presentation on NGO activities to measure NO₂ in Tokyo by passive sampler, and an example of initiatives for abatement of air pollution problems in urban area: revival of Light Railroad Transportation (LRT) and park and ride. The action research process involving government and citizen was emphasized for that approach.

14. Mr. Mohd Famey Yusoff introduced programs for promotion of public awareness projects in Malaysia to leaning institution and schools such as “Wira Alam” (nature heroes) projects to inculcate school children with environmental values, environmental awareness camp to instill interest in the protection of the environment into school children conducted by NGO, scrap book competition and inter-varsity environmental debate. As to general public and industries, Malaysia environmental week with many activities to celebrate Langkawi Declaration and environmental awards were explained, and also publications, pamphlets and posters to expose and give knowledge about the environment problems were showed.
15. Ms. Alimaa Shagdar made a presentation on the state of air quality, main resources of air pollution, the ambient air quality monitoring and the public awareness on air pollution in Mongolia. The urban air pollution problems in Ulaanbaatar, caused mainly by coal fired-power & heat combined plants and industrial boilers as stationary source, automobiles, coal fired household stoves and small sized heat only boilers as low source, were significantly recognized and ambient monitoring activities are implemented in 22 sites. The government has been carrying out the public awareness on air pollution in urban area for emission mitigation of household stoves through reducing of coal consumption, yearly public awareness campaign on environmental protection and the joint project for compiling brochure on acid deposition problems.
16. Ms. Velonika Alexandrovna Ginzburg presented the present state on public awareness on environmental problems in Russia. Acid deposition problems refers

back to 80th when the Convention on Long Range Transboundary Atmospheric Pollution were widely discussed, and now associate more with past than with present or future issues in the mind of majority Russians. Targeting scientists and environmental professionals, NGOs, local and regional authorities, Federal authorities, current information are available such as official reports, scientific articles, mass media articles, seminars and conferences for users to reawaken public awareness on acid deposition problems, and also for advertising company to obtain the important information of possible outcome for decision makers.

17. Mr. Pichaid Atipakya delivered a presentation on review of, current and future activities on public awareness program in Thailand. The government developed brochures for acid deposition problems and disseminated them through the workshop with advise of executive committee on public awareness program. Lectures on acid deposition were implemented to students, and brochures, posters, video tape and VCD are currently produced. The workshop to disseminate them will be held, and electronic display board installed in 2000 will be utilized to disseminate the information to public in the future.

18. Mr. Tran Son introduced the activities on public awareness such as producing a VCD on acid deposition problems cooperated with Vietnam Television, developing brochure on acid deposition containing origin, detection and abatement of the damage of acid deposition for school children and people who are not scientists. The workshop was held to disseminate the brochure attended by schools, universities, institutions and officers. These activities are implemented in cooperation with relevant Ministries.

19. Mr. Soulideth Souvannalath made a presentation on the environmental education and awareness (EEA) in Lao P.D.R. Though the environment agency was established only ten years ago, many programs and activities have been planed and done such as creation of core team and working group to enhance EEA, development of the EEA Strategy and Action Plan, and Training Needs Assessment etc. The achievements are related to the four target areas; 1) formal education, 2) non-formal education, 3) manpower capacity building and 4) networking, collaboration and

communication. Many different sectors are activated and overcoming constraints of lack of human resources, formal and non-formal educations and training activities etc. by EEA activities.

Demonstration of Program on Environmental Education

20. Dr. Masahisa Sato, IGES, presented the ADORC-IGES Joint eLearning Project on acid deposition problems in East Asia region. Showing merits of eLearning system such as low cost, high access, flexibility, innovativeness, and simultaneous sending and receiving knowledge, the eLearning system was introduced with the developing contents for educators of Junior and Senior High School, as the one way to solve the constraints to promote the environmental education/public awareness. Although the effectiveness and advantage of the eLearning were recognized among participants, it was pointed out that many people especially in developing countries cannot access to internet and have difficulty to utilize it until now.

Discussion on promotion of public awareness activities on acid deposition problems

21. In reply to request from the workshop secretariat, Dr. Bhandari raised the following observations on the presentations made at this workshop to discuss public awareness on acid deposition problems: the aspects of challenging task, a lot of enthusiasm and zeal, and many problems of activities introduced in this workshop were pointed out, and with some innovative examples and issues for consideration will lead to suggestions for the future such as workshop involving citizens, preparing trainers of trainers and integration of acid deposition into local cultural practice. There were many views and comments on it from the floor, such as there are few NGOs interested in acid deposition problems, the capacity and enthusiasm of teachers are the most important for continuous environmental education, and the training for trainer is efficient and necessary.

Wrap-up

22. Dr. Hiroshi Hara, National Institute of Public Health, Japan, made a presentation titled "Development of public Awareness for Acid Deposition". It was emphasized to enhance the mutual understanding between scientists and school teachers for

combination of scientific evidence and school children. As an atmospheric scientist, he introduced, as an example of environmental education, scientific approaches of cause of acid deposition, calculated annual deposition over Japan, precise concept of acidity and acid-base chemistry, and application of the tools to EANET measurements using many graphs and figures.

23. The Co-chairpersons of the Workshop stated that they would draw up the Chairperson's Summary of the Workshop as soon as possible.

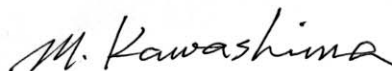
24. The Workshop was closed. All participants and observers expressed their gratitude and appreciation for the efforts made by the organizers and the host country for arrangement of this important Workshop.

21 February 2003

Niigata, Japan



Kusmulyani Sugiarto



Munetsugu Kawashima

Co-Chairpersons

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