

The Fifth Workshop on Public Awareness for Acid Deposition Problems  
28-29 January 2005, Niigata, Japan

## **CHAIRPERSON'S SUMMARY**

1. The Fifth Workshop on Public Awareness for Acid Deposition Problems was held in Niigata, Japan on 28 and 29 January 2005. It was organized by the Network Center for the Acid Deposition Monitoring Network in East Asia (EANET), in collaboration with the Joetsu Environmental Science Center (JOESC) and the Niigata Prefectural Environmental Conservation Corporation (NPECC) of Japan.

### Attendance

2. The Workshop consisted of two parts. Part I was attended by approximately forty participants and observers from EANET participating countries, namely Cambodia, China, Indonesia, Japan, Lao P.D.R., Malaysia, Mongolia, Philippines, Republic of Korea, Russia, Thailand and Viet Nam. The list of the participants is attached as Annex.
3. In addition to the participants of Part I, three hundred local residents of Niigata City, including experts and fifth grade pupils of Meike Elementary School, who have been studying acid deposition problems in a special education class, attended Part II of the Workshop.

### Background and Purpose

4. Acid Deposition and Oxidant Research Center (ADORC), serving as the Network Center for EANET, has been implementing the joint projects with Cambodia, China, Indonesia, Malaysia, Mongolia, Philippines, Russia, Thailand and Viet Nam to assist in the development of their own brochures/videotape for public awareness since Japanese Fiscal Year 1999. The Network Center for EANET (NC) held the First Workshop on Public Awareness for Acid Deposition Problems in February 2001 in Niigata, Japan. It was attended by participants from EANET countries. The Second Workshop was held in February 2002 in Beijing, China and was likewise attended by participants from all the participating countries of EANET. The Third and Fourth Workshop were held in Niigata in February 2003 and December 2003, respectively. During the Fourth Workshop, approximately two hundred local residents of Niigata attended Part II of the Workshop together with representatives from eleven participating countries of EANET.

5. To further encourage and promote these kinds of activities in EANET participating countries, NC undertook the Fifth Workshop on Public Awareness for Acid Deposition Problems. One of the major objectives of the Workshop was to exchange information and share experiences on public awareness activities and environmental education among the participating countries. Discussion on these were held during Part I of the Workshop on the first day at ADORC and on the morning of the second day at Niigata Convention Center “Toki Messe.”
6. The other major objective of the Workshop was to enhance public awareness activities among the general public and school children. Part II of the Workshop was organized for this purpose. It was held on the afternoon of the second day at Toki Messe. The approach used in this workshop was almost the same as that of the Fourth Workshop held in December 2003.

#### Opening and Election of Chairperson

7. The Workshop commenced with the opening address by Dr. Jiang Wei, Coordinator, the Secretariat for EANET.
8. Dr. Tsumugu Totsuka, Director General of ADORC, introduced the objectives of the Workshop in his opening speech.
9. Prof. Hiroshi Hara from Japan and Ms. Carmelita Macadangdang Passe from the Philippines were elected as the Co-chairpersons of the Workshop.

### **Part I**

#### Introduction of the progress of EANET activities on public awareness

10. Mr. Jiro Sato, NC, presented the progress of EANET activities on public awareness. It covered the background, short history and institutional arrangements of the EANET and previous activities directed to enhance public awareness on acid deposition problems. Mr. Sato further introduced the development of the 5 year medium term plan and a feasibility study on an appropriate instrument on acid deposition to provide sound basis for financial contribution for consideration by IG.

### Presentations on country experience

11. Mr. Chrin Sokha, Cambodia, made a presentation on the public awareness activities for acid deposition problems in Cambodia. He showed participants about the processes of the brochure development on acid deposition control which was supported by the Japan Fund for Global Environment, JOESC and ADORC. As acid deposition is a fairly new environmental concern in Cambodia, he pointed out that there is low awareness among the citizenry on this issue as well as the lack of experts in this field. To achieve the goals of intercepting and mitigating of any harmful impacts resulted from acid deposition, Mr. Chrin Sokha, in his presentation, he asked for technical supports from Japanese Government, ADORC and donor countries.
12. Mr. Fu Qiang, China, made a presentation on the framework of the China National Monitoring Center and the scheme of the National Monitoring Network for air quality and acid deposition monitoring. He mentioned that the general public gave a high regard on the environment and this can be seen in the number of complaints received by their environment agency from residents regarding pollution incidents in their areas. He attributed this kind of vigilance and active public participation to the information and environmental education activities which are being undertaken in his country.
13. Ms. Sinta Saptarina Soemiarno, Indonesia, discussed the national organizations dealing with acid deposition problems, their roles and the activities of different groups and what their future plans are. Public awareness activities on acid deposition implemented by various groups such as the women, religious, business groups, as well as the youth were introduced. Examples of the different approaches and special events were also presented. She emphasized the need for a better strategy on public awareness on acid deposition, update data and research, also involving more institutions such as the Department of Education, Department of Industry and local governments.
14. Ms. Motoko Egashira, Japan, introduced the activities on public awareness on acid deposition problems being undertaken in junior high schools and elementary schools in Japan. The activities in junior high schools were concentrated on the analysis of wet deposition samples and observation of impact caused by acid deposition. Lectures were given in elementary schools through the use of comic books that are easy to understand for school children. In addition to these activities, workshops for teachers, university students and non-governmental organizations (NGOs) were held in China as well as in Japan.
15. Ms. Bounyaseng Sengkhammy, Lao P.D.R., presented the recent monitoring results on Electric Conductivity (EC) and pH of wet deposition samples in Lao P.D.R.. She also presented current

- activities on public awareness for acid deposition. The activities include capacity building, preparation of national action plan and a work plan. In view of constraints in human resources, funds and equipment, she emphasized the need for assistance and support to ensure the continuous conduct of acid deposition monitoring and public awareness activities in her country.
16. Mr. Fouzi Abdullah, Malaysia, presented the Malaysian experiences in monitoring and public awareness activities. He also mentioned that special events such as the holding of environmental awareness camps, scrap book competition, environmental week and environmental debate and awards are being carried out in his country. MAWAR 90, for instance, is a project for younger students to instill in them awareness and concern for environment. Activities are also being planned to provide the public information on acid deposition, and to assist in the formulation of a policy that will promote a balanced and sustainable development.
  17. Ms. Alimaa Shagdar, Mongolia, presented the state of air quality in her country as well as the various public awareness activities being implemented on air pollution. She also presented the brochure on acid deposition for students which was produced by Central Laboratory of Environmental Monitoring (CLEM ) in 2003. She added that the brochure was introduced at a national workshop in 2004 which was attended by secondary school teachers, public workers and experts from universities. Annual public awareness campaigns included clean-up of rivers and ravines, tree planting, marathon race, lectures on environmental policy and law, among others.
  18. Ms. Carmelita Macadangdang Passe, Philippines, presented the various information, education and communication activities being undertaken by the Environmental Education and Information Division of the Environmental Management Bureau (EMB), which include the development of environmental education curriculum frameworks and environmental education guidebooks, the production of print and broadcast materials, the conduct of trainings and seminars for stakeholders and the holding of special events to commemorate various environmental celebrations. Public awareness activities specifically on acid deposition were also implemented. These include the development of a brochure on acid deposition, the conduct of training workshops, and the launching of the rain watch project for elementary schools.
  19. Mr. Boo Joo Kong, Republic of Korea, presented the on-line instructional system on acid deposition which was developed in his country. Since the system is on the website, it is readily accessible to interested individuals. A five-day study program consists of a summary, measurements and analysis, monitoring and the acidification phenomenon and reduction counter-measure. The system is similar to the e-learning courses being developed by ADORC.
  20. Prof. Alexander Ginzburg, Russia delivered a presentation on the organizations involved in the

EANET activities and the joint brochure project. The brochure, produced under the joint project with JOESC, was introduced at the national seminar on EANET activities in November 2004. During the seminar, EANET activities and experiences in public awareness and educational programs were presented. Acid deposition problems, the availability and usage of scientific information on air, precipitations, ground water, soil and vegetation among others were also discussed at the seminar.

21. Ms. Wassana Toruksa, Thailand, introduced the public awareness program for acid deposition in Thailand that has been undertaken since 1999. Two types of brochures on acid deposition were compiled during 1999-2000. A workshop on public awareness for acid deposition was also held in 2000 in Bangkok. In order to promote current activities, a new brochure on acid deposition was published in 2004. Experts on acid deposition made presentations at a workshop for public awareness in 2004. During the workshop, a demonstration of acidified rain and measurement of some liquids were conducted by the experts. Video tapes/video compact discs about transboundary acid deposition problems are currently being developed. The website and media for public awareness in Thailand was also discussed by Ms. Toruksa in her presentation together with the themes for future activities.
22. Ms. Tran Thuy Thanh, Viet Nam, discussed the sources of air pollution in her country. She likewise presented Vietnam's acid deposition monitoring system and the state of acid deposition. A video documentary on acid deposition was produced in collaboration with the Vietnam Television. Brochures on acid deposition which discussed how acid deposition occurs, its effects and solutions have been distributed to various audiences. Workshops for students and researchers were organized to disseminate information on acid deposition problems. In addition, lectures have been given in universities and training course for teachers and lectures on acid deposition were likewise undertaken.

#### Introduction of e-learning course in English

23. Ms. Ayako Kawauchi, NC, made a presentation on the English version of the e-learning course on acid deposition issues. The e-learning course has been developed to raise awareness on acid deposition problems and in order to serve as a guide for teachers to enhance their capacity to teach acid deposition problems at schools. The e-learning course in Japanese has been completed and offered in the website in 2004. The English version will be completed and open to public by the Seventh Session of the Intergovernmental Meeting to be held in November 2005.

#### Discussion on process and promotion of public awareness activities on acid deposition problems

24. Ms. Adelaida Bonquin Roman, programme officer, the Secretariat for EANET made a presentation on the development of the “Report for Policy Makers” and on the dissemination of awareness material and information to high level policy making bodies in cooperation with NC.
25. Dr. Sergey Arkadievych Gromov, NC, presented the summary of the views made in the presentations and subsequent discussions on public awareness for acid deposition problems by the representatives of EANET countries in the first day’s session. Some common approaches and suggestions were taken into consideration.
26. Dr. Masahisa Sato, programme specialist, Asia/Pacific Cultural Centre for UNESCO made a presentation on “Lessons Learnt from Practice: Identifying points to be considered for the promotion of Environmental Education activities in each country”. In his speech he emphasized some points to take note based on successful cases as well as from those that encountered difficulties. The worksheets filled up by the participants were basis of his considerations.

#### Wrap-up of the Part I

27. Prof. Hiroshi Hara, Tokyo University of Agriculture and Technology, Japan delivered a wrap-up presentation based on the discussions during Part I of the Workshop. He stressed the importance of acquiring basic knowledge such as acid formation mechanism, acid-base chemistry and interpretation of pH in order to understand clearly acid deposition problems.

### **Part II**

#### Opening

28. Dr. Tsumugu Totsuka, Director General of ADORC, gave his opening speech on behalf of the workshop organizers. Mr. Masaki Takahashi, Vice Governor of Niigata Prefecture, and Mr. Akira Shinoda, Mayor of Niigata City each gave their welcoming address.

#### Presentation on outcomes from environmental learning

29. The pupils of the fifth grade of Meike Elementary School, Niigata, Japan who have been studying acid deposition problems in a class since October 2004 introduced achievements of their study.

### Keynote speech

30. The keynote speech entitled "Environmental Education on Acid Deposition Problems" was delivered by Prof. Munetsugu Kawashima, Faculty of Education, Shiga University, Japan who is an expert in environmental education. He gave examples on how to treat acid deposition problems in schools and further discussed lifelong education from the viewpoint of integrated science. The highlights of his speech are as follows:

Environmental problems are still occurring despite advancements in the field of environmental education. The Development of methodology, training of leaders and provision of support system for teachers and NGOs are necessary to promote environmental education and to solve environmental problems. The Importance of learning through experience is essential. More teaching materials and programs should be developed to help students and citizens to develop the concern and understanding of the importance of solving the problems. Reduce, Reuse and Recycle have been promoted to solve the environmental problems. "Reject" was added to these actions to mean that people should only buy what is necessary.

### Discussion in the small groups

31. The audience has been divided into six small groups and each group discussed a theme about environmental problems from the viewpoint of citizens and school children. The discussions were led by facilitators ( local NGO members relevant to environment conservation ) and were initiated with the introduction on environmental problems in East Asia and advice by the participants from participating countries of EANET.

### Report on the discussion in the small groups

32. Representatives of each small group reported the outputs from the discussion with memorandum papers on big panels prepared during the discussion. The activities for environment conservation such as the corresponding practical behaviors in everyday life were presented under the relationship between global/regional environmental problems. It was mentioned that environmental problems should be solved not only by policy makers and scientists but by the general public and school children as well.

Wrap-up

33. Prof. Hiroshi Hara gave the closing remarks for Part II of the workshop.
34. The Co-chairpersons of the Workshop stated that they would prepare the draft of the Chairperson's Summary of the Workshop as soon as possible.

Closing

35. The Workshop was closed by Chairperson. The participants and observers expressed their gratitude and appreciation for the efforts made by the organizers and the host country in the arrangement for the Workshop.

29 January 2005

Niigata, Japan

Carmelita Macadandang Passe

Hiroshi Hara

Co-Chairpersons

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28 January 2005

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