NewsLetter

Malé Declaration on Control and Prevention of Air Pollution and Its Likely Transboundary Effects for South Asia

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Regional Training Programme on monitoring transboundary air pollutants

Annual refresher courses are organised at the regional level to enhance the harmonisation and Quality Assurance and Quality Control (QA/QC) of the Malé Declaration monitoring network. The sixth Regional Refresher Course was held at UNEP RRCAP, Thailand, during 25-28 March 2008.

This year's refresher course, attended by technical personnel and national project managers from National Implementing Agencies, aimed to improve data reporting; to review the passive sampler inter-comparison study; and to conduct a comparative review of air quality monitoring laboratories. In addition, participants were given hands-on training on rainwater analysis.

Data reporting: Participants discussed the data collected to date from the Malé Declaration monitoring activities, along with the data reporting format. It was agreed to revise the data reporting format to accommodate the recent developments in the monitoring network.

Passive sampler inter-comparison:

The passive sampler inter-comparison study completed its first phase. Participants reviewed the results and noted the potential for production and analysis of passive samplers in the region for the future. Final results will be presented to the stakeholders at the inter-governmental meeting during the last quarter of 2008.

Inter-laboratory comparison: The first attempt to compare laboratory quality in monitoring transboundary air pollution, under the Malé Declaration, was completed. Participants reviewed the results and discussed the need to further strengthen the data quality.

EXPANTION OF MONITORING NETWORK IN INDIA

The Central Pollution Control Board (CPCB), the National Implementing Agency in India, has sanctioned three new stations as part of the expansion of its monitoring network under the Malé Declaration. The new monitoring stations will be established at Dawki in Meghalaya; in the Lakshadweep Islands; and at Pathankot in Punjab. The stations will be operated by Meghalaya State Pollution Control Board (SPCB), Lakshadweep Pollution Control Committee (LPCC), and the Punjab State Pollution Control Board (SPCB) respectively. CPCB along with concerned SPCB/PCC is in the process of establishing these stations. April 2008

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Participants conducted laboratory analysis in small groups during the annual refresher course

Capacity Building on Impact Assessment

Regional training programme on air pollution impact assessment on crops

Capacity building activities on assessing air pollution impacts on crop are being carried out as part of phase III implementation of the Malé Declaration. These activities include regional-level trainings and case studies at the national level.

A regional-level workshop on crop impacts assessment was held in Pathumtani, Thailand on 11 March 2008 to discuss the results obtained thus far, from the national-level case studies. The workshop was attended by participants from the Malé Declaration member countries as well as experts from Air Pollution Crop Effect Network (APCEN).

The workshop reviewed the preliminary results from crop impacts assessment studies in Bangladesh, India, Nepal, Pakistan, and Sri Lanka. An assessment report compiling results from all case studies will be developed and communicated to policy makers. The workshop concluded with the following recommendations:

• Future studies need to be implemented using local plant species during the actual growing session.

• The co-benefit effects of addressing air pollution and climate change, needs to be considered in future studies to reflect climate change impacts as appropriate.



(L-R) Spinach plants exposed to ambient air in Lahore, Pakistan, May 2007, illustrate reduced growth in non-EDU treated plants compared to the three EDU-treated plants further right (Photo: R. Shamsi). Typical ozone injury on spinach leaves exposed to ambient air in Mymensingh, Bangladesh, March 2008 (Photo: Towhid Islam).

Regional training programme on the assessment of air pollution-related soil acidification

The first regional training programme on the assessment of air pollution related soil acidification was organised on 25 to 27 March 2008 at the UNEP RRC.AP, Thailand.

The workshop aimed to review the current status of impact assessment studies on soils and discuss plans to initiate soil acidification assessment studies as part of phase IV of the Malé Declaration implementation. Training was given on methods for assessing soil sensitivity to acidification, and estimating the time span for different soil types to acidify. Guided by the Malé Declaration soil monitoring manual, the workshop developed recommendations for site selection, parameters to be monitored and number of monitoring sites, for soil monitoring studies under the Malé Declaration.

For more information, please visit: www.rrcap.unep.org/male

Regional training programme on rapid urban assessment

Rapid Urban Air Quality Assessment (RUA) is being conducted in Kathmandu Nepal, as part of phase III implementation of the Malé Declaration.

The RUA method is embedded within an Air Quality Assessment Framework that develops strategic plan for air quality management at urban scale, involving stakeholder engagement. RUA is a "quick" technique for assessing air quality at the urban scale. It consists of two tasks that are carried out in parallel, one being field measurements and the other a rapid urban emissions inventory.

A three-day training workshop on RUA was organised during 5 to 7 March 2008 in Kathmandu, Nepal. The workshop was attended by representatives from National Implementing Agencies of Malé Declaration, who are expected to implement RUA activities in their countries.

The meeting discussed the results of RUA study in Kathmandu and identified the gaps in the region for conducting RUA studies.



Participants of the regional training programme on rapid urban assessment visiting the improved brick making facility in Kathmandu

Regional training programme on corrosion impacts of air pollution

Assessment of air pollution impacts on material corrosion is being conducted in India, Iran, Nepal, and Sri Lanka as part of phase III implementation of the Malé Declaration. The second regional-level training was conducted from 11 to 13 February 2008 in

Livingstone, Zambia, linking findings with similar corrosion studies in southern Africa. The workshop discussed the results obtained thus far with focus on the development of dose-response functions, stock of materials at risk, and evaluation of corrosion trends. The workshop, organised in collaboration with the Air Pollution Information Network for Africa (APINA) and the Corrosion Network (CORNET), enhanced the South-South cooperation on air pollution impact assessment.

EXCLUSIVE TRAINING

In March 2008, an exclusive training programme was organised for two newly recruited technicians from the Department of Environment (DoE) Bangladesh at the Asian Institute of Technology, Thailand. The training focused on the basics of air pollution monitoring as well as the use of methods such as use of Atomic Absorption Spectrometer (AAS) for laboratory analysis of rain samples. This training programme enhanced the capacity of the DoE laboratory in Kulna, which conducts the monitoring activities under the Malé Declaration.



Stakeholder's Participation

National Stakeholder's Meeting in Nepal

A National Stakeholder's Forum was held in Kathmandu, Nepal on 4 March 2008. The forum was organised by the National Focal Point (Ministry of Environment, Science and Technology - MOEST), and the National Implementing Agency (International Centre for Integrated Mountain Development - ICIMOD) in Nepal in collaboration with the Clean Air Network Nepal (CANN). The stakeholder's forum was inaugurated by Ms. Meena Khanal, Joint Secretary, MOEST. Ms. Khanal, in her inaugural address, said the impacts of air pollution and climate change are generally transboundary and global in nature and admired the Malé Declaration for providing the forum for the much needed regional cooperation for addressing these issues in South Asia. The stakeholder's forum was participated by nearly 100 stakeholders representing various groups including schools, industries, and media.

Stakeholders reviewed the air pollution issues and implementation of the Malé Declaration in Nepal. The stakeholder's forum developed a new coordination mechanism to address the air pollution issues in Nepal.



National Stakeholders reviewing the implementation of Malé Declaration in Katmandu, Nepal

National Stakeholder's Meeting in Bhutan

National Environment Commission (NEC),the National Implementing Agency for the Malé Declaration in Bhutan, convened a National Stakeholder's meeting as part of the phase III implementation of the Malé Declaration. The stakeholder's consultation took place in Thimpu on 28 April 2008. The meeting started with opening remarks from Mr. Sonam Yangley, Director, NEC, Bhutan. During the opening remarks, Mr.Yangley mentioned that implementation of Malé Declaration has strengthened the capacity to monitor air pollution in Bhutan. He also indicated that further capacity building is required to fully understand and control the issue of air pollution in Bhutan. The meeting , participated by 40 stakeholders representing various groups including different ministries, NGOs and the UNDP national office, reviewed the air pollution issues and Malé Declaration implementation in Bhutan and identified specific recommendations for further implementation air pollution related activities in the country.



National Stakeholders reviewing the implementation of Malé Declaration in Thimpu, Bhutan

Emission Inventory Preparation

Third training programme on emission inventory preparation, scenario-generation, and modeling for atmospheric transport and integrated assessment

The third training workshop on emission inventory preparation, scenario-generation, atmospheric transport modeling, and integrated information and assessment modeling (IIAM) was conducted from 28 January to 1 February 2008 in Thailand. The workshop aimed to build capacities in compiling emission inventories and modeling transport and impacts of air pollutants of eight participating countries within the Malé Declarations.

The workshop was attended by the National Implementing Agencies of the Malé Declaration, which had participated in compiling emission inventories at the national level. Resource persons from collaborating institutions such as the Stockholm Environment Institute (SEI), the International Institute for Industrial Environmental Economics (IIIEE), Swedish Meteorological and Hydrological Institute

(SMHI), and the European Commission as well as UNEP RRC.AP were present. The workshop was a follow-up of the first and second workshops, held in July 2006 and March 2007 respectively.



Participants in the workshop on emission inventory in Thimphu, Bhutan

National Training Programme on Emission Inventory Compilation

A two-day training workshop on the compilation of emission inventory was organised during 29 to 30 April 2008 at the Royal Institute of Management, Thimphu, Bhutan. The workshop aimed to assist the emission inventory compilation activities in Bhutan. The workshop was attended by representatives from National Environment Commission (NEC) and relevant ministries, undertaking the compilation of the emission inventory for the country.



Participants from National Implementing Agencies in the training workshop

DECISION SUPPORT INFORMATION

A training workshop on eco-housing was conducted during 31 March to 5 April 2008 at the UNEP RRC.AP office and Chulalongkorn University, Thailand. The objective was to build the capacity and develop awareness on the various aspects of eco-housing among Malé Declaration member countries. The workshop dealt with various aspects of eco-housing such as design, building materials, and construction techniques. The training included study visits to eco-housing projects at various sites in Thailand. Resource persons were drawn from the Chulalongkorn University, the Asian Institute of Technology, Thailand, and UNEP RRC.AP.



National Focal Points (NFP) and National Implementing Agencies (NIA)

Bangladesh NFP: Ministry of Environment & Forest

NIA: Department of Environment, Dhaka

Bhutan

NFP & NIA: National Environment Commission, Thimpu India NFP: Ministry of Environment and Forests

NIA: Central Pollution Control Board, Delhi

Iran NFP & NIA: Department of Environment, Tehran **Maldives** NFP: Ministry of Environment, Energy and Water

NIA: Department of Meteorology, Malé

Nepal NFP: Ministry of Environment Science and Technology

NIA: International Centre for Integrated Mountain Development (ICIMOD), Kathmandu **Pakistan** NFP: Ministry of Environment

NIA: Pakistan Environment Protection Agency, Islamabad

Sri Lanka NFP: Ministry of Environment & Natural Resources

NIA: Central Environment Authority, Colombo

Coordinating Agencies

UNEP Regional Resource Centre for Asia and the Pacific (UNEP RRC.AP) Bangkok, Thailand

South Asia Co-operative Environment Programme (SACEP) Colombo, Sri Lanka Stockholm Environment Institute (SEI) Stockholm, Sweden

STOCKHOLM

ENVIRONMENT

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WWW.RAPIDC.ORG

Malé Declaration Newsletter

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