

The Eighth Session  
of the Intergovernmental Meeting  
of the Malé Declaration on Control and Prevention of Air Pollution and Its Likely Transboundary  
Effects for South Asia; 13 September 2006

### **Work Programme in 2007 for Malé Declaration**

#### **I. INTRODUCTION**

1. At the Sixth Session of the Intergovernmental Meeting (IG6) on the Malé Declaration participating countries decided to start the Phase III activities of Malé Declaration, building on the outcomes of the Phase II activities. IG6 adopted a proposal for resource mobilization. With the approval of the proposal by Swedish International Development Co-operation Agency (Sida), the major donor agency supporting the Malé Declaration implementation, Phase III implementation was started in October 2005.

2. The Seventh Session of the Intergovernmental Meeting (IG7), held in New Delhi, India, in 2005, approved a three-year implementation plan for the Phase III implementation. This report describes the work programme of Malé Declaration in 2007 including the remaining activities for the calendar year 2006.

#### **II. OBJECTIVES**

3. The purpose of Phase III is to continue to promote the establishment of a scientific base for prevention and control of transboundary air pollution in South Asia and to encourage and facilitate coordinated interventions of all the stakeholders on transboundary air pollution at national and regional level. Specific objectives of Phase III include:

1. strengthen the regional cooperation and stakeholders participation under the Malé Declaration;
2. strengthen the capacity building programmes initiated during phase II;
3. enhance the capacity of NIAs on emission inventory development and Integrated Assessment Modeling
4. to enhance the analytical and impact assessment capability at the national level through integration of findings from local pollution studies and conducting assessment studies;
5. provide decision support information for policy formulation and air pollution prevention ; and
6. raise awareness for action through targeted dissemination

4. Towards the achievement of Phase III objectives, the Malé Declaration activities in 2007 will aim at each of the above objectives.

## II. STRENGTHEN THE REGIONAL COOPERATION AND STAKEHOLDERS PARTICIPATION UNDER THE MALÉ DECLARATION

### II-1 Intergovernmental meeting, regional stakeholders cum coordination meeting

5. The Ninth Session of the Intergovernmental Meeting (IG9) will be held in September 2007. Countries willing to host the IG9 are invited to express their intention to the Secretariat. The Secretariat will discuss the date and venue of IG9 with the host country.

6. IG9 may wish to consider the following agenda items, which will be elaborated later by the Secretariat in communication with the participating countries:

- review of the progress of Malé Declaration activities in 2007;
- review of the data report on transboundary air pollution monitoring in 2006/07;
- consideration of the revised technical manual and operational manual;
- consideration of Malé Declaration activities in Phase IV;
- consideration of the work programme of Malé Declaration in 2008; and
- any other issues raised by the participating countries.

7. The Second Session of the Regional Stakeholders cum Coordination (RSC2) meeting will be held immediately before the IG9 in September 2007. RSC2 may wish to consider the following agenda items, which will be elaborated later by the Secretariat in communication with the participating countries, stakeholders, and representatives of regional initiatives:

- review of the progress of Malé Declaration activities in 2007;
- updates from air pollution related activities in the member countries of Malé Declaration;
- updates from initiatives focusing on air pollution at regional and sub-regional level; and
- Updates from initiatives focusing on air pollution at global level.

### II-2 National Stakeholders meeting

8. National Stakeholders meetings have been convened in Bangladesh, India, Maldives, and Pakistan. One national stakeholders meeting will be organized in one of the participating countries during the second quarter of 2007. NIAs, in principle, should cover part of the expenses for conducting the national stakeholders meeting. The major aims of the national stakeholders forums include:

- increase awareness on transboundary air pollution;
- share and receive stakeholders views and ideas on implementation of the Malé Declaration; and
- improve the information exchange between information generators and users.

## II-2 Exchange programme

9. Secretariat will implement 2 two-week exchange programmes during the second and third quarter of 2007. Project managers of Malé Declaration will participate in the exchange programme, with the aim of exchanging experience between project managers of Malé Declaration at national level and the Secretariat at UNEP. Expected outcomes of the exchange programme include:

- report on the status of transboundary air pollution for each of the participating countries;
- report on the national priorities for Phase IV implementation of Malé Declaration; and
- better understanding between the project managers of Malé Declaration on the regional level implementation of Malé Declaration.

## III. STRENGTHEN THE CAPACITY BUILDING PROGRAMMES INITIATED DURING PHASE II

### III-1 Regional training in programme on monitoring

10. A regional training on monitoring transboundary air pollution will be organized in March 2007. Major objectives of the training will include:

- implementation of Quality Control and Quality Assurance (QA/QC) programme, specially the inter-laboratory comparison;
- review the data report 2006/07; and
- discuss the issues encountered in operating the monitoring sites in each country.

### III-2 Implementation of inter-laboratory comparison

11. In order to improve the quality of the participating laboratories of Malé Declaration, an inter-laboratory comparison will be conducted during 2007. Under this programme, artificial precipitation samples will be distributed to the participating laboratories of Malé Declaration. Participating laboratories of Malé Declaration will analyze and submit the results to central laboratory. The central laboratory will prepare reports on the inter-laboratory comparison, based on the data submitted by the participating laboratories for review and comments from the monitoring committee.

### III-3 Passive sampler inter comparison

12. A passive sampler inter-comparison programme will be implemented during 2007. Available passive samplers in the region will be compared with the IVL sampler for their data quality and analytical procedure over a period of 1 year.

### III- Establishment of new monitoring sites

13. Currently, the Malé Declaration monitoring network includes 8 monitoring sites, one in each of the participating countries. The NIAs from Bhutan and Sri Lanka have expressed their interest to establish additional monitoring stations under the Malé Declaration. During 2007, support will be provided for the establishment of 2 new monitoring sites, one each in Bhutan and Sri Lanka.

#### III-2 Central compilation, evaluation, and storage of data

14. The participating countries will submit the data and related information obtained through the regular monitoring activities to the Secretariat. The Monitoring Committee will conduct a data verification to ensure the quality of the data. After the quality check by the Monitoring Committee, the data will be added to the regional data base. The Secretariat will prepare a preliminary draft "Data report" for the discussions at the refresher training programme proposed to be held in March 2007. After the verifications, the data will be available for the participating countries via intranet. ([www.rrcap.unep.org/md/](http://www.rrcap.unep.org/md/)).

### IV. ENHANCE THE CAPACITY OF NIAs ON EMISSION INVENTORY DEVELOPMENT AND INTEGRATED ASSESSMENT MODELING

#### IV-1 Emission inventory

15. Participants of the first workshop will continue to work on emission inventory compilation, and verify the assumptions made, check for mistakes in workbook, make a list of missing activity data and find them if possible, replace the international activity data and emission factors with better local data, and document the changes made in the workbook. Each participating country will write a report on main findings of the inventory compilation activities, share the problems through the email forum, summarize the findings, and make a presentation in next workshop.

#### IV-2 Scenario development

16. Participants of the first workshop will collect the relevant data so that the knowledge gathered in compiling scenarios using the international methods during the workshop can be tailored to the Malé Declaration countries, and explore the possibilities how policy options can be systematically considered in the South Asian context to help decision making on controlling and preventing emissions. A manual for the development of emission scenario will be developed.

#### IV-3 Modeling

17. Integrated Assessment Model (IAM) will be expanded in scope to an Integrated Information and Assessment System (IIAS). The first version of the IIAS, together with

user's manual, will be distributed to the NIAs. The IIAS for Malé Declaration countries requires substantial inputs and advice from the participants so that it can be improved to make it useful for the Malé Declaration countries. The MATCH model, which provides the transfer coefficients for the IIAS, will be installed at the Secretariat as a first step. MATCH model will be run at the Secretariat or at SMHI to meet the requirements/demands of the participating countries.

18. A follow-up training programme on emission inventory, scenario development, and IIAS will be organized in February 2007.

## V. ENHANCE THE ANALYTICAL AND IMPACT ASSESSMENT CAPABILITY AT THE NATIONAL LEVEL

### V-1 Rapid urban assessment

19. The aim of this activity is to develop capacity within the participating countries for the quantification of emissions and pollutant concentrations and link this to health effects through comparison of population exposure to air pollution using relatively rapid techniques. A case study will be undertaken in Kathmandu, Nepal.

### V-2 Health impact

20. The aim of this activity is to develop capacity within the participating countries to assess the impacts of air pollutants such as particulate matter on human health. A case study will be undertaken in Dhaka, Bangladesh.

### V-3 Crop impact

21. The aim of this activity is to strengthen knowledge on impacts of air pollution on crops. Case studies will be undertaken in Bangladesh, Bhutan, India, Pakistan, and Sri Lanka.

### V-4 Corrosion impact

22. The aim of this activity is to develop capacity within the participating countries to assess the impact of air pollution on materials and objects of cultural heritage. Case studies will be undertaken in India, Iran, Nepal and Sri Lanka.

23. Detailed Terms of Reference for each of the above mentioned case studies are provided in Annex 1 of the document Malé Declaration/IG/8/1.

### V-4 Training programmes

24. The following training programmes will be undertaken to disseminate the methodology for conducting the impact assessment studies:

- training programme on health and corrosion impact assessment in October 2006
- training programme on crop impact assessment in November 2006
- training programme on urban integrated assessment in February 2007
- training programme on soil acidification in February 2007

## VI. PROVIDE DECISION SUPPORT INFORMATION FOR POLICY FORMULATION AND AIR POLLUTION PREVENTION

25. Decision support information focuses on two major areas:

- Promote case studies in practical options to reduce air pollution;
- Study good practices for local, national and regional level legal and financial measures and provide options tailored for each country.

### VI-1 Case studies

26. UNEP together with its regional expert network on eco-housing will provide technical support for the implementation of eco-housing demonstration projects in Bhutan and Maldives. Based on the experience in the demonstration projects in Bhutan, Maldives, and Sri Lanka, generic guidelines for the implementation of eco-housing projects will be completed during the last quarter of 2006.

### VI-2 Good practices

27. Activities on good practices will focus on: (i) identify the areas for pollution control and abatement in each of the participating countries; (ii) collate success stories (for pollution control and abatement); and (iii) dissemination of success stories in the participating countries.

ToR for the studies will be completed and the studies will be initiated during the first quarter of 2007.

## VII. RAISE AWARENESS FOR ACTION THROUGH TARGETED DISSEMINATION

### VII-1 Publication

28. The Sixth Session of the Intergovernmental Meeting of the Malé Declaration requested the preparation of a publication focusing on past, present, and future of Malé Declaration. The first draft report has been completed. After the discussion and possible adoption by Eighth Session of the Intergovernmental Meeting, the report will be published during the second quarter of 2007.

### VII-2 Newsletter

29. The Malé Declaration network newsletter was launched in 2002 to disseminate the Malé Declaration related information to the public and stakeholders. The content of the newsletter has largely been reports on the network's activities. Two issues of the newsletter will be published during 2006/07 period: (i) Vol. 4; Number 2; November 2006; (ii) Vol. 5; Number 1; April 2007. National Implementing Agencies are encouraged to submit articles and news items for the newsletter.

#### VII-3 Awareness materials

To raise awareness about air pollution in South Asia for action through targeted dissemination, there will be activities to develop multimedia packages, publications, and brochures targeting youth groups and decision makers.

#### VII-4 Information sharing

30. The Secretariat will update Malé Declaration website by presenting relevant information on Malé Declaration activities, such as training programmes, meeting documents, and newsletter. Malé Declaration website provides link to national air quality data from 3 countries (i) Central Pollution Control Board, India; (ii) Ministry of Environment, Science and Technology, Nepal; and (iii) Air Resource Management Center, Sri Lanka. Other participating countries are encouraged to provide appropriate URLs to the Secretariat.