The Twelfth Session of the Intergovernmental Network Meeting of the Malé Declaration on Control and Prevention of Air Pollution and Its Likely Transboundary Effects for South Asia, 30 June 2011

# Report on the Progress of Malé Declaration after the Eleventh Session of the Intergovernmental Meeting (IG11)

### I. INTRODUCTION

- 1. This report reviews the progress of Malé Declaration activities after the Eleventh Session of the Intergovernmental Meeting (IG11) held in Bangladesh, Dhaka on 20-21 January 2010.
- 2. The review is based on the 6 objectives of the Phase IV implementation of the Malé Declaration:
  - Strengthen Regional Cooperation for addressing air pollution issues in South Asia;
  - Strengthen the air pollution monitoring network and conduct regular monitoring of high quality;
  - Enhance the impact assessment capacity of the national institutions and assess the impacts of air pollution and their socio-economic implications in the participating countries;
  - Enhance the capacity of National Implementation Agencies (NIAs) to undertake emission inventory and scenario development, atmospheric transfer of pollutants and Integrated Assessment Modelling;
  - Assist the member countries of Malé Declaration with the developing air pollution reduction policies and development of a regional framework; and
  - Raise awareness for action on air pollution issues through targeted information dissemination.

# II. STRENGTHEN REGIONAL COOPERATION AND STAKEHOLDER'S PARTICIPATION UNDER THE MALÉ DECLARATION

### **II-1 Intergovernmental meeting**

3. The annual intergovernmental and stakeholders meetings are an opportunity for the participating countries to share their experience and to plan for the future. The IG11 was held on 20-21 January 2010 in Dhaka, Bangladesh where the inauguration session was addressed by Dr. Young Woo Park, Regional Director, UNEP Regional Office for Asia and the Pacific (ROAP) and Dr. Mihir Kanti Mazumder Secretary, Ministry of Environment and Forests, Government of the People's Republic of Bangladesh. The meeting was jointly organised by the Department of Environment in collaboration with Ministry of Environment and Forests, Bangladesh and UNEP RRC.AP and is being attended by the Ministries of Environment NFPs and NIAs of the participating countries of the Malé Declaration and representatives from SACEP, SEI, AIT-UNEP RRC.AP, as well as resource persons from various organisations. The Meeting 1)reviewed the progress of the implementation of the Malé Declaration RAPIDC; 2)discussed national level updates and plan for phase the IV implementation;

3)endorsed, in principle, the documents on the Task Force on Future Development (TFFD) (Malé Declaration/IG11/5/1 and Malé Declaration/IG11/5/2); 4)adopted the work programme in 2010 for Malé Declaration (Malé Declaration/IG11/6/1); and 5)agreed in principle on the need for the closer cooperation among the existing networks and provided comments on the Joint Plan for Joint Activities of the Joint Forum . The Secretariat compiled the IG11 proceedings and distributed them through the internet at (www.rrcap.unep.org/Male/)

### II-2 Ensure Stakeholders Engagement with Intergovernmental Process

- 4. The participating countries of the Malé Declaration attended the Meeting of the Joint Forum which was held in Bangkok, Thailand on 10-11 March 2010. The meeting forms a continuation of the process which began in Bangkok on March 2009 where a Joint Meeting of the Intergovernmental Networks on Regional Air Pollution in Asia and the Pacific Region was held. It was agreed that the initiative could be continued as the "Joint Forum on Atmospheric Environmental Issues in Asia and the Pacific". The Meeting was also attended by member countries of the Acid Deposition Monitoring Network in East Asia (EANET); Acid Deposition and Oxidant Research Center (ADORC), presently named as Asia Centre for Air Pollution Research (ACAP); the Association of Southeast Asian Nations (ASEAN) Secretariat, Central Asian Environment Convention Secretariat, Pacific Regional Environment Programme (SPREP) Secretariat, SACEP Secretariat, Clean Air Initiative for Asian Cities (CAI-Asia), Institute for Global Environmental Strategies (IGES), Stockholm Environment Institute- York (SEI-Y), Global Atmospheric Pollution (GAP) Forum and UNEP RRC.AP were also represented. Resource persons and observers from various institutions also attended the Meeting. The Joint forum is a venue for information sharing, capacity building for better cooperation among the different networks.
- 5. Representatives from Malé Declaration counties participated in a seminar on "Co-benefits Approach: Emerging Trends and Needs" held on 11-12 March 2010, in Bangkok, Thailand, which was organised by IGES in collaboration with UNEP and funded by the Ministry of Environment, Japan (MoE-J). The goals of the seminar were to a) disseminate the concept and the usefulness of a cobenefits approach in Asia; b) share the latest information on co-benefits technologies and experiences on co-benefits projects in Asia; and c)receive feedback and comments on a possible co-benefits network for Asia. More details available in the website at www.iges.or.jp/en/cp/activity20100311cb.html
- The Regional workshop on Cleaning Up Transport for South Asia, organised by SACEP and 6. UNEP Partnership for Clean Fuels and Vehicles (PCFV), under the framework of Malé Declaration, was held in Colombo, Sri Lanka on 22-23 March 2010. Participants from the Ministries of Environment Transport and other relevant Ministries from South Asian countries attended the workshop of which a set of recommendations were drafted, covering public and non-motorised transport, sulphur levels in fuels, regional harmonisation of vehicle standards, inspection programmes and second-hand vehicle importations, for approval at the SACEP Ministerial Meeting. The the website proceeding of the report is available in at www.unep.org/transport/pcfv/regions/Asiaregional.asp and www.sacep.org
- 7. Malé Declaration counties participated in a Special Session on Corrosion Exposures held on 14-16 April 2010 organised in Garston, UK. The representatives from Malé Declaration countries

presented their experience and possibilities for future development on corrosion exposures in each country level. The opportunity to collaborate on the corrosion impact studies on stock at risk and cost with health studies (rapid urban assessment) was explored. There is also an opportunity to benefit from co-operation between different parts of the world. Exchange of data and information are very valuable and activities in all countries should establish, or strengthen, the link between policy and science.

### II-3 Establish a Task Force on Future Development (TFFD) of Malé Declaration

- 8. The ToR of the TFFD was adopted during the Tenth Session of the IG (IG10) held in Colombo, Sri Lanka in August 2008. The NIAs and NFPs of the participating countries of Malé Declaration (Bangladesh, Bhutan, India, Iran, Maldives, Nepal, Pakistan, Sri Lanka), nominated the members of the TFFD.
- 9. The First Meeting of the TFFD, held on 2-3 August 2010, at Pathumthani, Thailand, attended by the TFFD members, resource persons from different organisations including ACAP, AIT, SACEP, and Sustainable Development Policy Institute (SDPI). Representatives from UNEP- Nairobi, ROAP and UNEP RRC.AP also attended the Meeting. The Meeting agreed that 1) a mechanism for sustainable financing will be developed; 2) the feasibility study on establishing regional centres will be conducted according to the meeting discussions and will be developed in a phased manner; 3) a feasibility report on developing a regional framework on air pollution reduction in South Asia will be conducted based on the discussions during the meeting to strengthen the Malé Declaration framework.
- 10. The Second Meeting of the TFFD was held on 29-30 November 2010 in Colombo, Sri Lanka as a follow up to the First Meeting. It was attended by the TFFD members, resource persons from SACEP, SEI and ScandEnvironment. Representatives from SDPI, UNEP, and UNEP RRC.AP were also in the Meeting. The Task Force reviewed and discussed the progress on the a)establishment of the financial mechanism; b)feasibility study on the establishment of regional centres; and c) feasibility study on strengthening the framework on air pollution reduction in South Asia.

### II-4 Conduct a feasibility study on establishing regional centres

11. The First Meeting of the Task Force, held on 2-3 August 2010, in Pathumthani Thailand, agreed that the feasibility study on establishing regional centres will be conducted according to the following major outline a)Review of the socio-economic situation of South Asia; b)Existing Frameworks on air pollution reduction in South Asia; c)Possible options for consideration of the governments and d)Other Issues/Concerns. The Second Meeting of the TFFD, held on 29-30 November 2010 in Colombo Sri Lanka, reviewed and discussed the progress of the feasibility study on the establishment of regional centres. Detailed outline was agreed and the locations of each regional centres was proposed. The draft feasibility is being reviewed and finalised for consideration and adoption of the Twelfth IG (IG12) which will be held during the 2nd quarter of 2011.

### III. STRENGTHEN CAPACITY BUILDING PROGRAMMES INITIATED DURING PHASE IV ON MONITORING

### **III-1** Continue operation of the monitoring stations

- 12. NIAs continued the operation of the monitoring sites during 2008-2010 of which all countries submitted their data to the regional database at the Malé Declaration Secretariat. The new design on wet only collectors presented during IG10 meetings were provided to all 11 stations of Malé Declaration. Details of the Malé Declaration monitoring sites are provided in the Annex 2.
- 13. The NIA in Iran has completed the establishment of second monitoring station at Zahedan, electrical problems have been resolved and the station with the cooperation of security forces was installed near the region's police station. In India, there were four new monitoring stations at Dawki, Meghalaya bordering Bangladesh on Eastern side; Pathankot, Punjab bordering Pakistan; Lakshadweep islands bordering Maldives; and Daranga, Baska District near Bhutan Border. The Technical Committee (TC) conducted site audit for India and provided site specific recommendations for further improvement of the data quality.

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

- 14. In order to improve the quality of the participating laboratories of Malé Declaration, an inter-laboratory comparison programme was implemented based on an inter-laboratory comparison protocol which was presented again during 8<sup>th</sup> Regional Refresher Training held in India on November 2010.
- 15. Currently the samples are being sent to the countries and plan to complete before coming Ninth regional refresher training to be held during third quarter of 2011.

### III-3 Regional training programme

- 16. The Eighth Regional Training Programme and Refresher Course was held in New Delhi, India on 18-20 November 2010 with the aim to continue to train concerned technicians and to strengthen the monitoring network based on the common methodologies. The training was organised by CPCB, New Delhi together with AIT-UNEP RRC.AP. Thirty six participants from NIAs and NFPs, resource persons from SEI, IVL, MoC, CPCB, and AIT-UNEP RRC.AP participated in the training.
- 17. A 3-day hands-on training for the monitoring technicians from Bhutan and Maldives was organised and conducted by CPCB in coordination with AIT-UNEP RRC.AP on 22-24 November 2010 in New Delhi India. The training provided actual experience for the participants in collecting the samples, data reporting and quality assurance quality control (QA/QC) and good laboratory practices.

### III-7 Central compilation, evaluation, and storage of data

18. The participating countries have submitted their data and related information obtained through the monitoring activities in 2009/10 to the Secretariat. After quality check by the MoC, the

data were added to the regional database. The regional database is available online for the NIAs at: <a href="http://www.rrcap.unep.org/male/">http://www.rrcap.unep.org/male/</a>

## IV. ENHANCE THE CAPACITY OF NIAS ON EMISSION INVENTORY, SCENARIO DEVELOPMENT AND INTEGRATED ASSESSMENT MODELING

19. The 4th Training Workshop on Emission Inventory Preparation, held in New Delhi, India on 16-17 November 2010 was participated by concerned technicians from the government agencies of the Malé Declaration countries (Bangladesh, Bhutan, Iran, India, Maldives, Nepal, Pakistan and Sri Lanka), as well as representatives from SEI-Y and UNEP RRC.AP. This training provided hands on experience in the compilation of emission inventory and development of integrated assessment.

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

### V-1 Assess the socio-economic impact of air pollution on the health of people

- 20. Final reports on the health impact assessment study conducted during the last implementation is being reviewed by health Experts after which, it will be distributed to concerned stakeholders. This health impact assessment study is now conducted in Nepal and Pakistan during this implementation phase.
- 21. Third regional training workshop was held on 23-25 March 2011 in Kathmandu, Nepal. The training was attended by 17 health and air quality experts from 7 participating countries who are involved in health impact studies and air pollution related activities. They are from Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. The training was conducted by resource person from Murdoch University, Australia together with AIT-UNEP RRC.AP and ICIMOD. Expert from National Institute of Preventive & Social Medicine (NIPSOM), Bangladesh who involved in the previous study conducted in Dhaka, during Phase III implementation was also involved as a resource person for this training. The participants were actively involved in the workshop. Emphasis was given to discussion of implementation plans on health impact studies to be conducted in Nepal and Pakistan. Sri Lanka also expressed willingness to involve in the study.

# V-2 Assess the impact of ozone and climate change on arable agriculture, food security and livelihoods in South Asia

22. A workshop on "multi-stakeholder policy dialogue: ground level O<sub>3</sub> as a threat to food security" was held on 16 November 2010 in New Delhi India with the objective to develop a framework research programme on O<sub>3</sub> for policy making. This seminar, hosted by GAP Forum in collaboration with SEI and UNEP, was attended by the NIAs and NFPs of the Malé Declaration; crop experts from various organisations including the UK; other stakeholders from the region, resource persons from Imperial College London; AIT-UNEP

- RRC.AP, International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Centre for Ecology and Hydrology Edinburgh; Tokyo University; Banaras Hindu University; and Food and Agriculture Organization (FAO) of the United Nations New Delhi was in the meeting.
- 23. The Malé Declaration Workshop on Crop Impacts, organised by AIT-UNEP RRC.AP and SEI-Y was held in New Delhi, India on 15 and 17 November 2010. The Workshop aimed at continuing the capacity building on crop impact assessment and to develop and implementation plan for the Phase IV next phase of implementation. It was attended by participants from the Malé Declaration countries including Bangladesh, Bhutan, India, Iran, Maldives, Nepal, Pakistan and Sri Lanka; as well as representatives from SEI-Y and UNEP RRC.AP. Regional experts and participants from Japan, UK, and India also joined the workshop.
- 24. An implementation plan for the crop impact assessment studies is finalised. The NIAs nominated expert institutions and are on the process of conducting the study.

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

### VI-1 Study the feasibility and form of a regional framework for air pollution reduction

25. The TFFD during the First Meeting held in Pathumthani, Thailand on 2-3 August 2010, agreed to conduct a feasibility study on strengthening the regional framework on air pollution reduction in South Asia. The major outline was discussed and adopted which included a)Review of the socio-economic situation of South Asia; b)Existing Frameworks on air pollution reduction in South Asia; c)Possible options for consideration of the governments and d)Other Issues/Concerns. The progress on the feasibility study was discussed during the Second Meeting of the TFFD held on 29-20 November 2010 in Colombo, Sri Lanka. The TFFD also agreed to finalise the feasibility report by email and will be presented to the IG12 Meeting during the 2<sup>nd</sup> quarter of 2011 for consideration and adoption. A resolution on the study was also finalised for consideration and adoption of the Ministerial Meeting of SACEP GC in 2011.

### VI-2 Support national-level implementation of policies and measures to reduce atmospheric emissions

26. A study on the specific technical, fiscal and policy measures for emission reduction is conducted in Bangladesh. The progress of the study is presented during Sixth Regional Stakeholders cum Coordination Meeting (RSC6) held on 28-29 June 2011.

### VII. RAISE AWARENESS FOR ACTION THROUGH TARGETED DISSEMINATION

### VII-1 Develop Handbook on control and prevention of air pollution

27. A book on air pollution-promoting regional cooperation is published in 2010. The book was also disseminated during the BAQ conference 2010 and during the TFFD Meetings in 2010.

#### **VII-2** Newsletter and Brochure

28. The Malé Declaration newsletter was launched in 2002 to disseminate Malé Declaration related information to the public and stakeholders. The content of the newsletter has largely been reports on the network's activities. It is expected that the newsletter will serve as a medium for information sharing both within and beyond the Malé Declaration network. The digital file could be downloaded from <a href="http://www.rrcap.unep.org/male">http://www.rrcap.unep.org/male</a>. The newsletter and brochure were distributed to all the members of UNEP Collaborative Assessment Network (CAN), which includes generators and users of environmental data in Asia. The newsletter is also distributed through relevant meetings.

### **VII-2 Information sharing**

29. The Secretariat updated the Malé Declaration website by posting relevant information on Malé Declaration activities, such as training programmes, meeting documents, and the newsletter. Relevant scientific and technical information was disseminated among the participating countries, as well as other countries, relevant organizations, and individuals.