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

Air pollution is an emerging issue in Asia as it is in other parts of the world. In particular, emission of sulphur dioxide and nitrogen oxides has been rising steadily over the past few decades. In addition, rapid growth of cities together with associated expansion of industry and transport systems has made the Asian region increasingly concerned with these emissions.

To cope with the issue of transboundary air pollution in South Asia, the 'Malé Declaration on Control and Prevention of Air Pollution and Its Likely Transboundary Effects for South Asia' was adopted and discussed in March 1998 by the Ministers of the Environment at the seventh meeting of the Governing Council of South Asia Cooperative Environment Programme (SACEP) in Malé, Republic of Maldives. Swedish assistance for the Malé Declaration Project commenced in 1998 with the adoption of the said declaration. The Project is being implemented in eight countries (Bangladesh, Bhutan, India, Iran, Maldives, Nepal, Sri Lanka and Pakistan). In addition to the Declaration, Environment Ministries in each of the countries nominated the National Implementing Agencies (NIAs). Accordingly, Pakistan Environmental Protection Agency has been nominated as NIA in Pakistan.

The Declaration is an agreement to achieve the intergovernmental cooperation to address the increasing threat of transboundary air pollution and consequential impacts due to concentrations of pollutant gases and acid deposition on human health, ecosystem function and corrosion of materials. Beside laying down the general principles of intergovernmental cooperation for air pollution abatement, the Declaration sets up an institutional framework linking scientific research and policy formulation. Malé declaration also makes provision for the cooperation among the key stakeholders in tackling the transboundary air pollution in South Asia.

#### **Male Declaration-I:**

The tasks assigned to the NIAs under Phase-I of the Male Declaration (July 1998 to February 2000) are given below:

- To carry out a baseline study
- Compilation of expert's database
- Create a database on air pollution
- Formulation of a national action plan to cope with the air pollution.

## **Implementation Status:**

A country report containing the Baseline Report, National Action Plan, Database, Maps and National Emission Inventory was compiled in July, 2000 and forwarded to UNEP after approval from the Ministry of Environment.

The implementation of Phase-I of the Male activities covering the network establishment, baseline studies and action plans were coordinated by Regional Resource Centre for Asia and the Pacific (RRC-AP) of UNEP, Bangkok in

collaboration with all member countries of SACEP. At the final workshop held in Malé in 2000, baseline studies and action plans were reviewed and agreement reached on the Phase-II of the project.

#### Malé Declaration-II:

The purpose of the implementation of Phase-II of the Malé Declaration is the actual establishment of monitoring stations and studies to understand and put forth options to address the issues for prevention of transboundary air pollution.

Phase-II of the Malé Declaration Project coordinated by UNEP.RRC.AP was under implementation from 2001-April 2004 with the following objectives.

- Expand the network established during Phase-I.
- Strengthen the monitoring capacities in the region; and
- Study and analyze the effects and status of air pollution in South Asia.

The tasks assigned to the NIAs under Phase -II of the Male Declaration are given below:

- Selection of sites for setting up monitoring stations.
- Provision of required equipment by UNEP-AP.
- To Install the Monitoring Stations by February, 2004.
- To organize a one week in-country training programme for all the technicians supposed to carry out the installation of monitoring equipment.
- Monitoring results of the air may be reported to RRC.AP on monthly basis from March, 2004.
- To organize a national stakeholders meeting in Pakistan by February, 2004.

### Malé Declaration-Ill:

The overall objective of implementation of Phase III is to continue to promote the establishment of a scientific base for prevention and control of transboundary air pollution in Pakistan as part of regional initiative in South Asia.

The tasks assigned to the NIAs under Phase -III are given below:

- The National Advisory Committee (AC) established during Phase II implementation will meet, at least once in a year, at national level and advise the NIA and other organizations involved in monitoring exercises. It should also act as an information-clearing house, and meeting ground for those interested in air pollution issues.
- Participation by the NIA project coordinator of the Male Declaration, in an exchange programme which will be held at the Male Declaration secretariat at RRC.AP.

- Regularly report the monitoring results in digital format to RRC.AP for the centralized database, which is maintained at RRC.AP, Bangkok.
- Provide guidance and nominate an expert institution for the development of regional integrated assessment modeling and atmospheric transport capability.
- Provide guidance and nominate an expert institution for training on emission inventory compilation, modeling and scenario development.
- Official nomination of an expert institution for the participation of training on emission inventory compilation, modeling and scenario development and to upgrade the Male Declaration Integrated Assessment Model (IAM).
- Nominate an expert institution for the crop impact assessment and conduct the crop impact assessment programme.
- Provide guidance and nominate an expert institution for development of urban rapid integrated assessment.
- Provide guidance and nominate an expert institution for the human health impact assessment programme.
- Provide guidance and nominate an expert institution to conduct the corrosion impact assessment programme.
- Provide guidance and nominate an expert institution for the impact study on soil acidification.

### **Implementation Status:**

Project Coordinator of the Malé Declaration has attended the exchange programme which was held at the Male Declaration secretariat at RRC.AP in January, 2008. Monitoring results in digital format are regularly being reported to RRC.AP for the centralized database. Botany Department of Punjab University has been nominated as an expert institution for the crop impact assessment to conduct the crop impact assessment programme. The experiments are being conducted there and results are also reported to the RRC.AP. Pak-EPA is working for swift implementation of Phase-Ill of the Malé Declaration Programme.